





MACHINERY'S MATHEMATICAL TABLES

Most Commonly used Tables Selected from MACHINERY'S Handbook, which Contains 1592 Pages of Tabulated Data and Specific Information for Mechanical Engineers, Machine Designers, Draftsmen, Toolmakers and Machinists

CONTENTS

Powers, Roots, and Reciprocals	1
Circumferences and Areas of Circles	51
Natural Trigonometric Functions	63
Tables of Logarithms	108

NEW YORK

THE INDUSTRIAL PRESS

LONDON: THE MACHINERY PUBLISHING COMPANY, LTD.

COPYBIGHT, 1929 THE INDUSTRIAL PRESS NEW YORK

TABLES SELECTED FROM MACHINERY'S HANDBOOK

FOR MACHINE SHOP AND DRAFTING ROOM

MATHEMATICAL TABLES

Square and Cube Roots of Decimal Numbers

				,				
Deci- mal	Square Root	Cube Root	Deci- mal	Square Root	Cube Root	Deci- mal	Square Root	Cube Root
0.01	0.1000	0.2154	0.34	0.5831	0.6980	0.67	0.8185	0.8750
0.02	0.1414	0.2714	0.35	0.5916	0.7047	0.68	0.8246	0.8794
0.03	0.1732	0.3107	0.36	0.6000	0.7114	0.69	0.8307	0.8837
0.04	0.2000	0.3420	0.37	0.6083	0.7179	0.70	0.8367	0.8879
0.05	0.2236	0.3684	0.38	0.6164	0.7243	0.71	0.8426	0.8921
0.06	0.2449	0.3915	0.39	0.6245	0.7306	0.72	0.8485	0.8921
0.07	0.2646	0.4121	0.40	0.6325	0.7368	0.73	0.8544	0.9004
0.08	0.2828	0.4309	0.41	0.6403	0.7429	0.74	0.8602	0.9045
0.09	0.3000	0.4481	0.42	0.6481	0.7489	0.75	0.8660	0.9045
0.10	0.3162	0.4642	0.43	0.6557	0.7548	0.76	0.8718	0.9126
0.11	0.3317	0.4791	0.44	0.6633	0.7606	0.77	0.8775	0.9166
0.12	0.3464	0.4932	0.45	0.6708	0.7663	0.78	0.8832	0.9205
0.13	0.3606	0.5066	0.46	0.6782	0.7719	0.79	0.8888	0.9244
0.14	0.3742	0.5192	0.47	0.6856	0.7775	0.80	0.8944	0.9283
0.15	0.3873	0.5313	0.48	0.6928	0.7830	0.81	0.9000	0.9322
0.16	0.4000	0.5419	0.49	0.7000	0.7884	0.82	0.9055	0.9360
0.17	0.4123	0.5540	0.50	0.7071	0.7937	0.83	0.9110	0.9398
0.18	0.4243	0.5646	0.51	0.7141	0.7990	0.84	0.9165	0.9435
0.19	0.4359	0.5749	0.52	0.7211	0.8041	0.85	0.9220	0.947.3
0.20	0.4472	0.5848	0.53	0.7280	0.8093	0.86	0.9274	0.9510
0.21	0.4583	0.5944	0.54	0.7348	0.8143	0.87	0.9327	0.9546
0.22	0.4690	0.6037	0.55	0.7416	0.8193	0.88	0.9381	0.9583
0.23	0.4796	0.6127	0.56	0.7483	0.8243	0.89	0.9434	0.9619
0.24	0.4899	0.6214	0.57	0.7550	0.8291	0.90	0.9487	0.9655
0.25	0.5000	0.6300	0.58	0.7616	0.8340	0.91	0.9539	0.9691
0.26	D. 5099	0.6383	0.59	0.7681	0.8387	0.92	0.9592	0.9726
0.27	0.5196	0.6463	0.60	0.7746	0.8434	0.93	0.9644	0.9761
0.28	0.5292	0.6542	0.61	0.7810	0.8481	0.94	0.9695	0.9796
0.29	0.5385	0.6619	0.62	0.7874	0.8527	0.95	0.9747	0.9830
0.30	0.5477	0.6694	0.63	0.7937	0.8573	0.96	0.9798	0.9865
0.31	0.5568	0.6768	0.64	0.8000	0.8618	0.97	0.9849	0.9899
0.32	0.5657	0.6840	0.65	0.8062	0.8662	0.98	0.9899	0.9933
0.33	0.5745	0.6910	0.66	0.8124	0.8707	0.99	0.9950	0.9967
								

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
	1	I	1.00000	1.00000	1.0000000	I
2	4	8	1.41421	1.25992	0.5000000	2
3	9	27	1.73205	1.44225	0.3333333	3
4	16	64	2.00000	1.58740	0.2500000	4
5	25	125	2.23607	1.70998	0.2000000	5
6	36	216	2.44949	1.81712	0.1666667	6
7	49	343	2.64575	1.91293	0.1428571	7
8	64	512	2.82843	2.00000	0.1250000	8
9	81	729	3.00000	2.08008	0.111111	9
10	100	1,000	3.16228	2.15443	0.1000000	10
11	121	1,331	3.31662	2.22398	0.0909091	11
12	144	1,728	3.46410	2.28943	0.0833333	12
13	169	2,197	3.60555	2.35133	0.0769231	13
14	196	2,744	3.74166	2.41014	0.0714286	14
15	225	3,375	3.87298	2.46621	0.0566667	15
16	256	4,096	4.00000	2.51984	0.0625000	16
17	289	4,913	4.12311	2.57128	0.0588235	17
18	324	5,832	4.24264	2.62074	0.0555556	18
19	361	6,859	4.35890	2.66840	0.0526316	19
20	400	8,000	4.47214	2.71442	0.0500000	20
21	441	9,261	4.58258	2.75892	0.0476190	2 I
22	484	10,648	4.69042	2.80204	0.0454545	22
23	529	12,167	4.79583	2.84387	0.0434783	23
2.4	576	13,824	4.89898	2.88450	0.0416667	24
25	625	15,625	5.00000	2.92402	0.0400000	25
26	676	17,576	5.09902	2.96250	0.0384615	26
27	729	19,683	5.19615	3.00000	0.0370370	27
28	784	21,952	5.29150	3.03659	0.0357143	28
29	841	2.1,389	5.38516	3.07232	0.0344828	29
30	900	27,000	5 - 47723	3.10723	0.0333333	30
31	961	29,791	5.56776	3.14138	0.0322581	31
32	1,024	32,768	5.65685	3.17480	0.0312500	32
33	1,089	35,937	5.74456	3.20753	0.0303030	33
34	1,156	39,304	5.83095	3.23961	0.0294118	34
35	1,225	42,875	5.91608	3.27107	0.0285714	35
36	1,296	46,656	6.0000	3.30193	0.0277778	36
37	1,369	50,653	6.08276	3.33222	0.0270270	37
38	1,444	54,872	6.16441	3.36198	0.0263158	38
39	1,521	59,319	6.24500	3.39121	0.0256410	39
40	1,600	64,000	6.32456	3.41995	0.0250000	40
41	1,681	68,921	6.40312	3.44822	0.0243902	41
42	1,764	74,088	6.48074	3.47603	0.0238095	42
43	1,849	79,507	6.55744	3.50340	0.0232558	43
44	1,936	85,184	6.63325	3.53035	0.0227273	44
45	2,025	91,125	6.70820	3.55689	0.0222222	45
46	2,116	97,336	6.78233	3.58305	0.0217391	46
47	2,209	103,823	6.85565	3.60883	0.0212766	47
48	2,304	110,592	6.92820	3.63424	0.0208333	48
49	2,401	117,649	7.00000	3.65931	0.0204082	49 50
50	2,500	125,000	7.07107	3.68403	0.020000	1 30

Powers, Roots and Reciprocals

51 2,601 132,651 7.14143 3.70843 0.0196078 51 52 2,704 140,608 7.21110 3.73251 0.019308 52 53 2,809 148,877 7.28010 3.75629 0.0185185 54 54 2,916 157,464 7.34847 3.77976 0.0185185 53 55 3,025 166,375 7.41620 3.80295 0.0178571 56 56 3,136 175,616 7.48331 3.82956 0.0178571 56 57 3,249 185,193 7.54983 3.84850 0.0175419 57 58 3,364 195,112 7.61577 3.87088 0.0172414 58 59 3,441 205,379 7.68115 3.89300 0.0160492 59 60 3,500 216,000 7.74597 3.91487 0.016667 60 61 3,721 226,981 7.81025 3.99589 0.016299 0.01629 0.01629	No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
52 2,704 140,608 7.21110 3.73251 0.0198368 52 53 2,809 148,877 7.28011 3.75629 0.0188679 53 54 2,916 157,464 7.34847 3.77976 0.0185185 54 55 3,025 166,375 7.41620 3.80295 0.0185185 54 56 3,136 175,616 7.48311 3.82586 0.0178571 56 57 3,249 185,193 7.54983 3.84850 0.0172414 58 59 3,481 205,379 7.68115 3.8930 0.0169492 59 60 3,600 216,000 7.74597 3.91487 0.016092 59 61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,844 238,328 7.87401 3.95789 0.0161290 62 63 3,969 250,144 8.00204 4.0000 0.158730 63 64<	51	2,601	132,651	7.14143	3.70843	0.0196078	51
53 2,809 148,877 7.28011 3.75629 0.0185679 53 54 2,916 157,464 7.34847 3.77976 0.0185185 54 55 3,025 166,375 7.44620 3.80295 0.0181818 55 56 3,136 175,616 7.48331 3.8286 0.0172414 58 58 3,364 195,112 7.67577 3.87088 0.0172414 58 59 3,481 205,379 7.68115 3.89300 0.0169492 59 60 3,600 216,000 7.74597 3.91487 0.0166067 60 61 3,721 226,981 7.87401 3.95789 0.0161290 62 63 3,969 250,047 7.93725 3.97906 0.015330 63 64 4,096 267,144 8.00000 4.0000 0.015330 63 65 4,225 274,625 8.06226 4.02173 0.015330 63 66 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.0192308</td> <td>52</td>						0.0192308	52
54 2,916 157,464 7.34847 3.77976 0.0185185 54 55 3,025 166,375 7.41620 3.80295 0.0181818 55 56 3,136 175,616 7.48331 3.82586 0.0178571 56 57 3,249 185,193 7.54983 3.84850 0.0172414 58 59 3,481 205,379 7.61577 3.87088 0.0172414 58 59 3,481 205,379 7.61577 3.89300 0.0169492 59 60 3,600 216,000 7.74597 3.91487 0.0166667 60 61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,841 238,328 7.87413 3.9789 0.0161290 62 63 3,969 250,047 7.93725 3.97906 0.0158730 63 64 4,0262 221,444 8.0000 4.0000 0.0158730 63 6	1 - 1		148,877	7.28011	3.75629	0.0188679	53
55 3,025 166,375 7.41620 3.80295 0.0181818 55 56 3,136 175,616 7.48311 3.82586 0.0178571 56 57 3,249 185,193 7.54983 3.84850 0.0175439 57 58 3,361 195,112 7.61577 3.87088 0.0172414 58 59 3,481 205,379 7.68115 3.89300 0.0169492 59 60 3,600 216,000 7.74597 3.91487 0.0166667 66 61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,844 238,328 7.87401 3.95789 0.0161290 62 63 3,969 250,047 7.93725 3.97906 0.0158730 63 64 4,066 262,144 8.0000 4.0000 0.0158730 63 65 4,225 274,625 8.06226 4.2073 0.015820 64 64<				7.34847	3.77976	0.0185185	54
56 3,136 175,616 7.48331 3.82586 0.0178571 56 57 3,249 185,193 7.54983 3.84850 0.0175439 57 58 3,364 195,112 7.61577 3.87088 0.0172414 58 59 3,481 205,379 7.68115 3.89300 0.0169492 59 60 3,600 216,000 7.74597 3.91487 0.0166667 60 61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,844 238,328 7.87401 3.95789 0.0161290 62 63 3,969 250,047 7.93725 3.97906 0.0158730 63 64 4,096 262,144 8.00226 4.02073 0.0158730 63 65 4,225 274,625 8.06226 4.0273 0.0158730 63 66 4,356 287,496 8.12404 4.04124 0.0151515 66						0.0181818	
57 3,249 185,193 7,54983 3.84850 0.0175439 57 58 3,364 195,112 7,61577 3.89380 0.0169492 59 60 3,600 216,000 7,74597 3.91487 0.0166667 60 61 3,721 226,981 7.81025 3.93550 0.0163934 61 62 3,844 238,328 7.87401 3.95789 0.016390 62 63 3,969 250,047 7.93725 3.99966 0.0153730 63 65 4,225 274,625 8.06226 4.0000 0.0156730 63 65 4,225 274,625 8.06226 4.07073 0.0153846 65 64 4,356 287,496 8.12404 4.04124 0.0151515 66 67 4,489 300,763 8.18335 4.06155 0.0147059 68 69 4,761 328,509 8.30660 4.10157 0.0147059 68 6						0.0178571	
58 3,364 195,112 7.61577 3.87088 0.0172414 58 59 3,481 205,379 7.68115 3.89300 0.0169492 59 60 3,600 216,000 7.74597 3.91487 0.0169492 59 61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,844 238,328 7.873725 3.97906 0.0158730 62 63 3,969 250,047 7.93725 3.97906 0.0158730 62 64 4,096 262,144 8.0000 4.0000 0.0158730 62 65 4,225 274,625 8.06226 4.0273 0.0153846 65 67 4,489 300,763 8.18335 4.06155 0.0147059 68 68 4,624 314,432 8.24621 4.08166 0.0147059 68 69 4.761 328,509 8.30662 4.10157 0.0142857 70 7					3.84850	0.0175439	57
\$9 3,481 205,379 7.68115 3.89300 0.0169492 59 60 3,600 216,000 7.74597 3.91487 0.0166667 60 61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,844 238,328 7.87401 3.95789 0.0161290 62 63 3,969 250,047 7.93725 3.97906 0.0158730 63 64 4,096 262,144 8.0000 4.00000 0.0156350 64 65 4,225 274,625 8.06226 4.0273 0.0153515 66 66 4,356 287,496 8.12404 4.04124 0.0151515 66 67 4,489 300,763 8.18335 4.06155 0.0149254 67 68 4,624 314,432 8.24621 4.08166 0.0147059 68 69 4,761 328,509 8.30662 4.10157 0.0144928 69 70 4,900 343,000 8.36660 4.12129 0.0142857 70 71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0138389 72 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133333 75 76 5,776 438,976 8.71780 4.2582 0.0119570 76 77 5,929 456,533 8.77496 4.25432 0.0129870 77 78 6,084 474,552 8.83176 4.27666 0.0128205 78 79 6,241 493,039 8.88819 4.29084 0.0126582 79 79 6,241 493,039 8.88819 4.29084 0.0126582 79 80 6,400 512,000 8.94427 4.30887 0.0123457 81 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.012482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,255 614,125 9.21954 4.39683 0.0117647 85 86 7,396 636,056 9.27362 4.41400 0.0116379 86 87 7,569 658,503 9.32738 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.44797 0.0103696 92 91 8,281 753,571 9.53939 4.49194 0.0106389 94 92 8,464 778,688 9.5936 4.54684 0.0106389 94 93 9,604							
60 3,600 216,000 7.74597 3.91487 0.0166667 60 61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,844 238,328 7.87401 3.95789 0.0161990 62 63 3,969 250,047 7.93725 3.97906 0.0158730 63 64 4,096 262,144 8.0000 4.00000 0.0156250 64 65 4,225 274,625 8.06226 4.02073 0.0153846 65 66 4,356 287,496 8.12404 4.04124 0.0151515 66 67 4,489 300,763 8.18535 4.06155 0.0149254 67 68 4,624 314,432 8.24621 4.08166 0.0147059 68 69 4,761 328,509 8.30662 4.10157 0.0144928 69 70 4,900 343,000 8.36660 4.12129 0.0142857 70 71 5,041 357,911 8.42615 4.14082 0.014028 69 72 5,184 373,248 8.48528 4.16017 0.0138889 71 72 5,184 373,248 8.48528 4.16017 0.0138889 73 74 5,476 405,224 8.60233 4.19834 0.0136185 74 75 5,625 421,875 8.66025 4.21716 0.0133333 74 75 5,625 421,875 8.66025 4.21716 0.0133333 74 75 5,929 456,533 8.77496 4.25432 0.0129870 77 78 6,084 474.552 8.83176 4.27266 0.0128205 78 80 6,400 512,000 8.94427 4.30887 0.0129870 77 78 6,084 474.552 8.83176 4.27266 0.0128205 78 80 6,400 512,000 8.94427 4.30887 0.012582 79 6,241 493,039 8.88819 4.29084 0.0126582 79 6,241 493,039 8.88819 4.29084 0.0126582 79 6,241 493,039 8.94427 4.30887 0.0122500 80 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0120482 84 85 7,225 614,125 9.21954 4.39683 0.0117647 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 87 7,569 658,503 9.32738 4.43105 0.0112360 89 9 8,100 729,000 9.43868 4.4479 0.0112360 89 9 8,100 729,000 9.43868 4.4479 0.0112360 89 9 8,100 729,000 9.43868 4.448140 0.011111 9 9 8,4864 778,688 9.59166 4.54684 0.0103638 94 9 9,216 884,736 9.79796 4.55860 0.0104167 96 9 9,216 884,736 9.79796 4.55860 0.0101010 99 9 9,801 970,299 9.94987 4.60607 0.0101010 99					3.893∞	0.0169492	59
61 3,721 226,981 7.81025 3.93650 0.0163934 61 62 3,844 238,328 7.87401 3.95789 0.0161290 62 63 3,969 250,047 7.93725 3.97906 0.0158730 62 64 4,096 262,144 8.0000 4.0000 0.0156250 64 65 4,225 274,625 8.06226 4.02073 0.0153846 65 66 4,356 287,496 8.124,04 4.04124 0.0151515 66 67 4,489 300,763 8.18535 4.06155 0.0149254 67 68 4,624 314,432 8.24621 4.08166 0.0147059 68 69 4,761 328,509 8.30662 4.10157 0.0144928 69 70 4,900 343,000 8.36660 4.12129 0.0142857 71 71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0138889 72 73 5,329 389,017 8.5400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0135135 76 5,776 438,976 8.71780 4.23582 0.0131537 76 77 5,929 456,533 8.77496 4.25432 0.0128707 77 78 6,084 474,552 8.83176 4.27266 0.0128205 77 78 6,084 474,552 8.83176 4.29684 0.0126582 79 80 6,400 512,000 8.94427 4.30887 0.0128008 80 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0124928 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.0116767 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 87 7,569 658,503 9.32738 4.44100 0.0116279 86 87 7,569 658,503 9.32738 4.44100 0.0116279 86 87 7,569 658,503 9.32738 4.44100 0.0116279 86 88 7,744 681,472 9.38083 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.46475 0.0113636 88 89 7,921 704,969 9.43398 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.44797 0.0113636 88 90 8,100 729,000 9.48683 4.44797 0.0113636 89 91 8,281 753,571 9.53939 4.44709 0.010699 91 92 8,464 778,688 9.59166 4.51436 0.010699 91 93 8,649 804,3357 9.64365 4.53065 0.0105203 95 94 8,649 804,3357 9.64365 4.53065 0.0105263 95 94 9,216 884,736 9.79796 4.5690 0.0105204 98 99 9,801 970,299 9.4987 4.66067 0.0101010 99				7.74597	3.91487	0.0166667	60
62 3,844 238,328 7.87401 3.95789 0.0161290 62 63 3,969 250,047 7.93725 3.97966 0.0158730 63 64 4,096 262,144 8.00000 4.00000 0.0156250 63 65 4,225 274,625 8.06226 4.02073 0.0153846 65 66 4,356 287,496 8.12404 4.04124 0.0151515 66 67 4,489 300,763 8.18535 4.06155 0.0149254 67 68 4,624 314,432 8.24621 4.08166 0.0147059 69 69 4,761 328,509 8.36660 4.10157 0.0144928 69 70 4,900 343,000 8.36660 4.12129 0.0142857 70 71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0138889 72 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133333 75 76 5,776 438,976 8.71780 4.25432 0.0129870 77 78 6,084 474,552 8.83176 4.27266 0.0128205 78 6,084 474,552 8.83176 4.27266 0.0128205 78 6,084 474,552 8.83176 4.27266 0.0128205 78 6,6400 512,000 8.94427 4.30887 0.0125000 81 82 6,724 551,368 9.05539 4.34488 0.012351 82 83 6,889 571,787 9.11043 4.36207 0.0129482 83 84 7,056 592,704 9.16515 4.39683 0.0117647 86 87 7,255 614,125 9.21954 4.39683 0.0117647 86 88 7,225 614,125 9.21954 4.39683 0.0117647 86 88 7,225 614,125 9.21954 4.39683 0.0117647 86 88 7,225 614,125 9.21954 4.39683 0.0117647 86 88 7,225 614,125 9.21954 4.39683 0.0117647 96 90 8,100 729,000 9.43683 4.44190 0.0116366 88 97,921 704,969 9.4338 4.44190 0.0116079 86 90 8,100 729,000 9.43868 9.59166 4.51436 0.012360 88 90 8,100 729,000 9.43683 4.44197 0.0113636 88 90 90 8,100 729,000 9.43683 4.44197 0.0113636 88 90 90 8,100 729,000 9.43683 4.44197 0.0113636 88 90 90 8,100 729,000 9.43683 4.44190 0.01101111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0103696 92 93 8,649 804,357 9.64365 4.56697 0.0102003 95 94 8,836 830,584 9.69536 4.54684 0.010383 94 95 9,025 857,375 9.74679 4.56290 0.0102041 98 99 9,801 970,299 9.94987 4.66267 0.0101010 99						0.0163934	61
63					· ·	0.0161290	62
64 4,096 262,144 8.0000 4.0000 0.056250 64 65 4,225 274,625 8.06226 4.02073 0.0153846 65 66 4,356 287,496 8.12404 4.04124 0.0151515 66 67 4,489 300,763 8.18535 4.06155 0.0149254 67 68 4,624 314,432 8.24621 4.08166 0.0147059 68 69 4,761 328,509 8.30662 4.10157 0.0144928 69 70 4,900 343,000 8.36660 4.12129 0.0142857 70 71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0138389 72 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.6023 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133333 74 75 5,625 421,875 8.66025 4.21716 0.0133335 74 76 5,776 438,976 8.71780 4.25432 0.0129870 77 78 6,084 474,552 8.83176 4.27266 0.0128205 78 80 6,400 512,000 8.94427 4.30887 0.0125000 80 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.0117647 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 87 7,569 658,503 9.32738 4.44190 0.0116279 86 87 7,569 658,503 9.32738 4.44190 0.0116279 86 87 7,569 658,503 9.32738 4.44190 0.0116279 86 87 7,569 658,503 9.32738 4.44190 0.0116279 86 87 7,569 658,503 9.32738 4.44190 0.0116279 86 89 7,921 704,969 9.43398 4.46475 0.0113360 88 90 8,100 729,000 9.48683 4.44190 0.0116279 86 90 8,100 729,000 9.48683 4.44979 0.0109890 91 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0105896 92 93 8,649 804,357 9.64365 4.53065 0.0107204 98 99 9,25 857,375 9.74679 4.56290 0.0102049 98 99 9,801 970,299 912,673 9.84886 4.59470 0.0103039 97 98 9,025 857,375 9.74679 4.56290 0.010204 98 99 9,801 970,299 912,673 9.84886 4.59470 0.010309 97							63
65 4,225 274,625 8.06226 4.02073 0.0153846 65 66 4,356 287,496 8.12404 4.04124 0.0151515 66 67 4,489 300,763 8.18535 4.06155 0.0149254 66 68 4,624 314,432 8.24621 4.08166 0.0147059 68 69 4,761 328,509 8.30662 4.10157 0.0149287 69 70 4,900 343,000 8.36660 4.12129 0.0142857 70 71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0136986 73 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133333 75 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>64</td></td<>							64
66 4,356 287,496 8.12404 4.04124 0.0151515 66 67 4,489 300,763 8.18535 4.06155 0.0149254 67 68 4,624 314,432 8.24621 4.08166 0.0147059 68 69 4,761 328,509 8.36662 4.10157 0.014928 69 70 4,900 343,000 8.36660 4.12129 0.0142857 70 71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0138889 72 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0133333 75 75 5,625 421,875 8.66025 4.21716 0.0133333 75 76 5,776 438,976 8.71496 4.25432 0.012876 77 7				8,06226		0.0153846	65
67							
68							67
69 4,761 328,509 8.30662 4.10157 0.0144948 69 70 4,900 343,000 8.36660 4.12129 0.0142857 70 71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0136889 72 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133333 75 76 5,776 438,976 8.71780 4.23582 0.01351579 76 77 5,929 456,533 8.77496 4.27266 0.0128205 78 79 6,241 493,039 8.88819 4.29084 0.0126582 79 80 6,400 512,000 8.94427 4.30887 0.0123457 81 <t< td=""><td></td><td></td><td></td><td>000</td><td></td><td></td><td></td></t<>				000			
70				1 '	1 '		69
71 5,041 357,911 8.42615 4.14082 0.0140845 71 72 5,184 373,248 8.48528 4.16017 0.0138889 72 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133333 75 76 5,776 438,976 8.71780 4.23582 0.0131579 76 77 5,929 456,533 8.71496 4.25432 0.0129870 77 78 6,084 474,552 8.83176 4.27266 0.012805 78 79 6,241 493,039 8.88819 4.29084 0.012502 78 80 6,400 512,000 8.94427 4.30887 0.012305 80 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82<				1			
72 5,184 373,248 8.48528 4.16017 0.0138889 72 73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 405,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133333 75 76 5,776 438,976 8.71780 4.23582 0.0131579 76 77 5,929 456,533 8.77496 4.25432 0.0129870 77 78 6,084 474,552 8.83176 4.27266 0.012682 78 79 6,241 493,039 8.88819 4.29084 0.0126582 78 80 6,400 512,000 8.94427 4.30887 0.012582 78 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0112048 84 7,							
73 5,329 389,017 8.54400 4.17934 0.0136986 73 74 5,476 495,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66025 4.21716 0.0133135 74 76 5,776 438,976 8.71780 4.25432 0.0131579 76 77 5,929 456,533 8.77496 4.25432 0.0128205 78 79 6,241 493,039 8.88819 4.29084 0.012500 80 80 6,400 512,000 8.94427 4.30887 0.012500 80 81 6,561 531,441 9.0000 4.34675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85							
74 5,476 405,224 8.60233 4.19834 0.0135135 74 75 5,625 421,875 8.66023 4.21716 0.0133333 75 76 5,776 438,976 8.71780 4.23582 0.0131579 76 77 5,929 456,533 8.77496 4.255432 0.0128205 78 79 6,241 493,039 8.8819 4.29084 0.0126582 79 80 6,400 512,000 8.94427 4.30887 0.0123457 81 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.012945 83 83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.017647 86 86						1	
75							
76 5,776 438,976 8.71780 4.23582 0.0131579 76 77 5,929 456,533 8.77496 4.25432 0.0129870 77 78 6,084 474,552 8.83176 4.27266 0.0128205 78 79 6,241 493,039 8.88819 4.29084 0.0126582 78 80 6,400 512,000 8.94427 4.30887 0.0125000 80 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.017647 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 8	1						
77		0, 0					
78 6,084 474,552 8.83176 4.27266 0.0128205 78 79 6,241 493,039 8.88819 4.29084 0.0126582 79 80 6,400 512,000 8.94427 4.30887 0.012500 80 81 6,561 531,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.017647 85 86 7,396 636,056 9.27362 4.41400 0.016279 86 87 7,569 658,503 9.32738 4.44790 0.0113636 88 7,7921 704,969 9.43398 4.46475 0.0112360 89 89 7,				1			
79 6,241 493,039 8.88819 4.29084 0.0126582 79 80 6,400 512,000 8.94427 4.30887 0.0125000 80 81 6,561 531,441 9.0000 4.3675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.0117647 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 87 7,569 658,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38683 4.44797 0.0113636 88 89 7,911 704,969 9.43398 4.46475 0.0112360 89 9							
80 6,400 \$12,000 \$9,4427 \$4.30887 \$0.0125000 \$0 81 6,561 \$31,441 \$9.0000 \$4.32675 \$0.0123457 \$1 82 6,724 \$51,368 \$9.05539 \$4.34448 \$0.0121951 \$2 83 6,889 \$571,787 \$9.11043 \$4.36207 \$0.0120482 \$3 84 7,056 \$92,704 \$9.16515 \$4.37952 \$0.0119048 \$4 85 7,225 \$614,125 \$9.21954 \$4.39683 \$0.011647 \$5 86 7,396 \$636,056 \$9.27362 \$4.41400 \$0.0116279 \$6 87 7,569 \$658,503 \$9.32738 \$4.43105 \$0.0114943 \$8 89 7,911 704,969 \$9.43398 \$4.46477 \$0.0113636 \$8 89 7,911 704,969 \$9.43398 \$4.46475 \$0.0113636 \$8 89 7,917 704,969 \$9.43398 \$4.46475 \$0.0113636 \$8 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
81 6,561 \$31,441 9.0000 4.32675 0.0123457 81 82 6,724 551,368 9.05539 4.34448 0.0121951 82 83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.017647 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 87 7,569 658,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38083 4.44797 0.0113365 88 89 7,921 704,969 9.43398 4.4675 0.0112360 89 90 8,100 729,000 9.48683 4.48140 0.011111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92<						-	
82 6,724 551,368 9.05539 4.34448 0.011951 82 83 6,889 571,787 9.1043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.0117647 85 86 7,396 636,056 9.27362 4.41400 0.016279 86 87 7,569 638,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38083 4.44797 0.011360 88 89 7,921 704,969 9.43398 4.46475 0.0112360 88 90 8,100 729,000 9.48683 4.48140 0.0111111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,649 804,357 9.64365 4.5365 0.0107527 93 93 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>8r</td>							8r
83 6,889 571,787 9.11043 4.36207 0.0120482 83 84 7,056 592,704 9.16515 4.37952 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.0117647 85 86 7,396 636,056 9.27362 4.414∞ 0.0116279 86 87 7,559 658,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38083 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.46475 0.0112360 89 90 8,1∞ 729,∞ 9.48683 4.48140 0.0111111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 83 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69536 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99							82
84 7,056 \$92,704 9.16\$15 4.379\$2 0.0119048 84 85 7,225 614,125 9.21954 4.39683 0.0117647 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 87 7,569 658,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38683 4.44797 0.0113636 88 89 7,911 704,969 9.43398 4.46475 0.0113636 89 90 8,100 729,000 9.48683 4.48140 0.0111111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69536 4.54684 0.0106383 94 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>8.3</td></td<>							8.3
85 7,225 614,125 9.21954 4.39683 0.017647 85 86 7,396 636,056 9.27362 4.41400 0.0116279 86 87 7,569 658,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38083 4.44797 0.0113636 89 89 7,921 704,969 9.43398 4.46475 0.0112360 89 90 8,100 729,000 9.48683 4.48140 0.011111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 39 94 8,836 830,584 9.69536 4.54684 0.0105263 95 95 9,025 857,375 9.74679 4.56290 0.0105263 95 9							
86 7,396 636,056 9.27362 4.414∞ 0.0116279 86 87 7,569 638,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38083 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.46475 0.011360 88 90 8,100 729,000 9.48683 4.48140 0.011111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,644 778,683 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 39 94 8,836 830,584 9.69336 4.54684 0.0105383 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97							85
87 7,569 658,503 9.32738 4.43105 0.0114943 87 88 7,744 681,472 9.38083 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.46475 0.0112360 89 90 8,100 729,000 9.48683 4.48140 0.011111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69536 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.57886 0.010479 95 96 9,216 884,736 9.79796 4.57886 0.010467 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98							
88 7,744 681,472 9.38083 4.44797 0.0113636 88 89 7,921 704,969 9.43398 4.46475 0.0112360 89 90 8,100 729,000 9.48683 4.48140 0.0111111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69536 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.57886 0.0104167 96 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>1</td><td>87</td></td<>						1	87
89 7,911 704,969 9.43398 4.46475 0.0112360 89 90 8,100 729,000 9.48683 4.48140 0.0111111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69536 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.4987 4.62607 0.0101010 99							
90 8,100 729,000 9.48683 4.48140 0.0111111 90 91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69536 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99	1						89
91 8,281 753.571 9.53939 4.49794 0.0109890 91 92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69336 4.54684 0.0105283 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.010393 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99							
92 8,464 778,688 9.59166 4.51436 0.0108696 92 93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69336 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99							-
93 8,649 804,357 9.64365 4.53065 0.0107527 93 94 8,836 830,584 9.69536 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99							
94 8,836 830,584 9.69536 4.54684 0.0106383 94 95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99	1 -		1				
95 9,025 857,375 9.74679 4.56290 0.0105263 95 96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99	1						
96 9,216 884,736 9.79796 4.57886 0.0104167 96 97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99					1		
97 9,409 912,673 9.84886 4.59470 0.0103093 97 98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99				1			
98 9,604 941,192 9.89949 4.61044 0.0102041 98 99 9,801 970,299 9.94987 4.62607 0.0101010 99					1		
99 9,801 970,299 9.94987 4.62607 0.0101010 99							
1 400 40,000 1,000,000 10,0000 4,04133 0,0100000 100	100	10,000	1,000,000	10.00000	4.64159	0.0100000	100

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
101	10,201	1,030,301	10.0499	4.65701	0.0099010	101
102	10,404	1,061,208	10.0995	4.67233	0.0098039	102
103	10,609	1,092,727	10.1489	4.68755	0.0097087	103
104	10,816	1,124,864	10.1980	4.70267	0.0096154	104
105	11,025	1,157,625	10.2470	4.71769	0.0095238	105
106	11,236	1,191,016	10.2956	4.73262	0.0094340	106
107	11,449	1,225,043	10.3441	4.74746	0.0093458	107
108	11,664	1,259,712	10.3923	4.76220	0.0092593	108
109	11,881	1,295,029	10.4403	4.77686	0.0091743	109
110	12,100	1,331,000	10.4881	4.79142	0.0090909	110
111	12,321	1,367,631	10.5357	4.80590	0.0090090	111
112	12,544	1,404,928	10.5830	4.82028	0.0089286	112
113	12,769	1,442,897	10.6301	4.83459	0.0088496	113
114	12,996	1,481,544	10.6771	4.84831	0.0087719	114
115	13,225	1,520,875	10.7238	4.86294	0.0086957	115
116	13,456	1,560,896	10.7703	4.87700	0.0086207	116
117	13,689	1,601,613	10.8167	4.89097	0.0085470	117
118	13,924	1,643,032	10.8628	4.90487	0.0084746	118
119	14,161	1,685,159	10.9087	4.91868	0.0084034	119
120	14,400	1,728,000	10.9545	4.93242	0.0083333	120
121	14,641	1,771,561	11.000	4.94609	0.0082645	121
122	14,884	1,815,848	11.0454	4.95968	0.0081967	122
123	15,129	1,860,867	11.0905	4.97319	0.0081301	123
124	15,376	1,906,624	11.1355	4.98663	0.0080645	124
125	15,625	1,953,125	11.1803	5.00000	0.0080000	125
125	15,876	2,000,376	11.2250	5.01330	0.0079365	126
127	16,129	2,048,383	11.2694	5.02653	0.0078740	127
128	16,384	2,097,152	11.3137	5.03968	0.0078125	128
129	16,641	2,146,689	11.3578	5.05277	0.0077519	129
130	16,900	2,197,000	11.4018	5.06580	0.0076923	130
131	17,161	2,248,091	11.4455	5.07875	0.0076336	131
132	17,424	2,299,968	11.4891	5.09164	0.0075758	132
133	17,689	2,352,637	11.5326	5.10447	0.0075188	133
134	17,009	2,406,104	11.5758	5.11723	0.0074627	134
135	18,225	2,460,375	11.6190	5.12993	0.0074074	135
136	18,496	2,515,456	11.6619	5.14256	0.0073529	136
1 -	18,769	2,571,353	11.7047	5.15514	0.0072993	137
137	19,044	2,628,072	11.7473	5.16765	0.0072464	138
130	19,321	2,685,619	11.7898	5.18010	0.0071942	139
140	19,600	2,744,000	11.8322	5.19249	0.0071429	140
141	19,881	2,803,221	11.8743	5.20483	0.0070922	141
141	20,164	2,863,288	11.9164	5.21710	0.0070423	142
143	20,449	2,924,207	11.9583	5.22932	0.0069930	143
143	20,736	2,985,984	12.0000	5.24148	0.0069444	144
145	21,025	3,048,625	12.0416	5.25359	0.0068966	145
145	21,316	3,112,136	12.0830	5.26564	0.0068493	146
140	21,609	3,176,523	12.1244	5.27763	0.0068027	147
147	21,009	3,241,792	12.1655	5.28957	0.0067568	148
149	22,201	3,307,949	12.2066	5.30146	0.0067114	149
150	22,500	3,375,000	12.2474	5.31329	0.0066667	150
1,50	12,500	313731-00	1	3.3-3-3	1	1

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
151	22,801	3,442,951	12.2882	5.32507	0.0066225	151
152	23,104	3,511,808	12.3288	5.33680	0.0065789	152
153	23,409	3,581,577	12.3693	5.34848	0.0065359	153
154	23,716	3,652,264	12.4097	5.36011	0.0064935	154
155	24,025	3,723,875	12.4499	5.37169	0.0064516	155
156	24,336	3,796,416	12.4900	5.38321	0.0064103	156
157	24,649	3,869,893	12.5300	5.39469	0.0063694	157
158	24,964	3,944,312	12.5698	5.40612	0.0063291	158
159	25,281	4,019.679	12.6095	5.41750	0.0062893	159
160	25,600	4,096,000	12.6491	5.42884	0.0062500	160
161	25,921	4,173,281	12.6886	5.44012	0.0062112	161
162	26,244	4,251,528	12.7279	5.45136	0.0061728	162
163	26,569	4,330,747	12.7671	5.46256	0.0061350	163
164	26,896	4,410,944	12.8062	5.47370	0.0060976	164
165	27,225	4,492,125	12.8452	5.48481	0.0060606	165
166	27,556	4,574,296	12.8841	5.49586	0.0060241	166
167	27,889	4,657,463	12.9228	5.50688	0.0059880	167
168	28,224	4,741,632	12.9615	5.51785	0.0059524	168
169	28,561	4,826,809	13.0000	5.52877	0.0059172	169
170	28,900	4,913,000	13.0384	5.53966	0.0058823	170
171	29,241	5,000,211	13.0767	5.55050	0.0058480	171
172	29.584	5,088,448	13.1149	5.56130	0.0058140	172
173	29,929	5,177,717	13.1529	5.57205	0.0057803	173
174	30,276	5,268,024	13.1909	5.58277	0.0057471	174
175	30,625	5,359,375	13.2288	5 . 59344	0.0057143	175
176	30,976	5,451,776	13.2665	5.60408	0.0056818	176
177	31,329	5,545,233	13.3041	5.61467	0.0056497	177
178	31,684	5,639,752	13.3417	5.62523	0.0056180	178
179	32,041	5,735,339	13.3791	5.63574	0.0055866	179
180	32,400	5,832,000	13.4164	5.64622	0.0055556	180
181	32,761	5,929,741	13.4536	5.65065	0.0055249	181
182	33,124	6,028,568	13.4907	5.66705	0.0054945	182
183	33,489	6,128,487	13.5277	5.67741	0.0054645	183
184	33,856	6,229,504	13.5647	5.68773	0.0054348	184
185	34,225	6,331,625	13.5015	5.69802	0.0054054	185
186	34,596	6,434,856	13.6382	5.70827	0.0053763	186
187	34,390	6,539,203	13.6748	5.71848	0.0053476	187
188		6,644.672	13.7113	5.72865	0.0053191	188
	35,344					189
189	35,721 36,1∞	6,751,269 6,859,000	13.7477	5.73879	0.0052910	190
191	36,481	6,967,871	13.8203	5.75897	0.0052356	191
192	36,864	7,077,888	13.8564	5.76900	0.0052083	192
193	37,249 37,636	7,189.057 7,301,384	13.8924	5.77900 5.78896	0.0051813	193 194
194			13.9284	5.70890	0.0051540	194
195	38,025	7,414,875	13.9642	1 1	• •	
196	38,416	7,529,536	14.0000	5.80879	0.0051020 0.0050761	196
197	38,809	7,645,373	14.0357	5.82849		197
198	39,204	7,762,392	14.0712		0.0050505	198
199	39,601 40,000	7,880,599 8,000,000	14.1067	5.83827	0.0050251	199 200
200	40,000	3,000,000	14.1421	5.04004	5.0050000	200

201 40,401 8,120,601 14.1774 5.85777 0.0049751 201 202 40,804 8,242,408 14.2127 5.86747 0.0049505 202 203 41,209 8,365,427 14.2478 5.87713 0.0049261 203 204 41,616 8,489,664 14.2829 5.88677 0.0049202 204 24,025 42,025 8,615,125 14.3178 5.89637 0.0049261 203 205 42,436 8,741,816 14.3527 5.99594 0.0048544 206 207 42,849 8,869,743 14.3875 5.91548 0.0048309 207 208 43,661 9,129,329 14.4222 5.92499 0.0048077 208 23,661 9,129,329 14.4568 5.93447 0.0047647 209 210 44,100 9.261,000 14.4914 5.94392 0.0047619 210 211 44,521 9.393,931 14.5258 5.95334 0.0047393 211 212 44,944 9,528,128 14.5602 5.96273 0.0047619 210 211 44,5796 9,800,344 14.6287 5.98142 0.0046729 214 45,796 9,800,344 14.6287 5.99073 0.0046729 214 215 46,625 9,938,375 14.6629 5.99073 0.0046296 216 46,636 10,077,696 14.6969 6.0000 0.0046296 216 47,521 10,503,459 14.7986 6.0265 0.004603 217 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 47,961 10,503,459 14.7986 6.02765 0.004603 217 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 48,400 10,648,000 14.8976 6.05505 0.0045622 219 220 48,440 10,648,000 14.8997 6.05505 0.0045623 221 222 49,284 10,941,048 14.8997 6.05505 0.0045455 222 223 49,729 11,089,567 14.9332 6.06413 0.0044433 223 224 50,766 11,543,176 15.0333 6.09120 0.0044043 224 227 51,529 11,690,605 15.0000 6.08220 0.0044043 224 225 50,655 11,390,625 15.0000 6.08220 0.0044043 227 228 51,984 11,823,352 15.0997 6.10911 0.0042033 227 228 51,964 11,823,352 15.0997 6.10911 0.0042033 227 228 51,966 11,543,176 15.0333 6.09120 0.0043486 229 224 53,851 12,497,168 15.2315 6.14463 0.00431			T	1			
202 40,804 8,242,408 14.2127 5.86747 0.0049505 202 203 41,209 8,365,427 14.2478 5.87713 0.0049261 203 204 41,616 8,489,664 14.2829 5.886737 0.0049260 204 205 42,025 8,615,125 14.3178 5.89637 0.0049260 204 205 42,025 8,615,125 14.3178 5.89637 0.0048780 205 206 42,436 8,741,816 14.3527 5.90594 0.0048544 206 207 42,849 8,869,743 14.3875 5.91548 0.0048309 205 208 43,264 8,998,912 14.4222 5.92499 0.0048077 208 209 43,681 9,129,329 14.4568 5.93447 0.0047847 209 210 44,100 9,261,000 14.4914 5.94392 0.0047619 210 211 44,521 9,393,3931 14.5258 5.95334 0.0047393 211 212 44,944 9,528,128 14.5602 5.96273 0.0047170 212 213 45,369 9,663,597 14.5945 5.97209 0.0046948 213 214 45,796 9,800,344 14.6287 5.98142 0.0046729 214 215 46,225 9,938,375 14.6629 5.99073 0.0046729 214 216 46,656 10,077,696 14.6969 6.00000 0.0046296 216 217 47,089 10,218,313 14.7309 6.00925 0.0046083 213 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045872 218 219 47,961 10,503,459 14.8324 6.03681 0.0045872 218 219 48,841 10,993,861 14.8661 6.04594 0.004585 220 220 48,400 10,648,000 14.8324 6.03681 0.004585 221 221 48,841 10,993,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0046083 223 223 49,729 11,089,567 14.9332 6.06413 0.0045435 222 224 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.004483 223 224 50,176 11,239,424 14.9666 6.07318 0.0044643 223 225 50,625 11,390,625 15.000 6.0520 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.004428 226 227 51,529 11,697,083 15.0665 6.10017 0.0044953 223 233 52,900 12,167,000 15.1658 6.12693 0.0043103 222 234 54,756 12,343,7168 15.2315 6.1463 0.004373 233 233 54,289 12,649,337 15.2643 6.13836 0.004373 233 234 54,756 13,344,256 15.3623 6.17975 0.0042735 233 235 55,696 13,144,256 15.3623 6.17975 0.0042735 233 236 55,696 13,144,256 15.3623 6.17975 0.0042733 236 237 56,169 13,312,053 15.3948 6.18846 0.0041494 241 241 58,081 13,997,521 15.5563 6.23168 0	No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
203 41,209 8,365,427 14.2478 5.87713 0.0049261 203 204 41,616 8,489,664 14.2829 5.88677 0.0049202 204 205 42,025 8,615,125 14.3178 5.89637 0.0048780 204 206 42,436 8,741,816 14.3527 5.90594 0.0048544 206 207 42,849 8,869,743 14.3875 5.91548 0.0048544 206 207 42,849 8,869,743 14.3875 5.91548 0.0048544 206 209 43,681 9,129,329 14.4568 5.93447 0.0047874 209 210 44,100 9,261,000 14.4914 5.9439 0.0047619 210 211 44,521 9,393,931 14.5258 5.95334 0.0047393 211 212 44,944 9,528,128 14.5602 5.96273 0.0047170 210 213 45,369 9,663,597 14.5945 5.97209 0.0046948 213 214 45,796 9,800,344 14.6287 5.98142 0.0046729 214 215 46,225 9,938,375 14.6629 5.99073 0.0046912 215 216 46,656 10,077,696 14.6969 6.0000 0.0046296 216 217 47,089 10,218,313 14.7309 6.00925 0.004683 217 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045872 218 210 48,800 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045872 221 222 49,284 10,941,048 14.8997 6.05505 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.004585 222 222 49,284 10,941,048 14.8997 6.05505 0.004643 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 222 224 50,176 11,343,176 15.0333 6.09120 0.0044843 222 225 50,625 11,390,625 15.000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044843 224 225 50,625 11,390,625 15.000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.004368 229 220 52,441 12,008,989 15.1327 6.11803 0.0043860 228 231 53,361 12,326,391 15.1987 6.89579 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 55,225 12,977,875 15.3628 6.12933 0.0043178 233 55,696 13,144,256 15.3623 6.17975 0.0042173 238 235 55,696 13,144,256 15.3623 6.17975 0.004217 238 236 55,696 13,144,256 15.3623 6.17975 0.004217 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041667 244 241 58,881 13,997,521 15.5563 6.23168 0.0041322 242	201			14.1774	5.85777	0.0049751	201
204	202	40,804		14.2127		0.0049505	202
205	203					0.0049261	203
206	204	41,616		14.2829	5.88677	0.0049020	204
207 42,849 8,869,743 14.3875 5.91548 0.0048309 207 208 43,264 8,998,912 14.4222 5.92499 0.0048077 208 209 43,681 9,129,329 14.4568 5.93447 0.0047847 209 210 44,100 9,261,000 14.4914 5.94392 0.0047619 210 211 44,521 9,393,931 14.5258 5.95334 0.0047393 211 212 244,944 9,528,128 14.5602 5.96273 0.0047170 212 213 45,369 9,663,597 14.5945 5.97209 0.0046948 213 215 46,225 9,938,375 14.6629 5.99073 0.0046948 213 215 46,255 9,938,375 14.6629 5.99073 0.0046948 215 216 46,656 10,077,696 14.6969 6.0000 0.004683 217 217 47,089 10,218,313 14.7309 6.0925 0.0046083 217 219 47,961 10,503,459 14.7986 6.02765 0.0045662 219 220 48,400 10,648,000 14.8324 6.03681 0.0045872 218 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 223 49,729 11,089,567 14.9332 6.06413 0.0044443 224 225 50,625 11,390,625 15.0000 6.08220 0.0044043 224 227 51,529 11,697,083 15.0665 6.10017 0.0043668 228 229 52,441 12,008,989 15.1327 6.11803 0.0043478 230 231 53,361 12,326,391 15.1987 6.11803 0.0042735 231 233 54,289 12,487,168 15.2315 6.14463 0.0043178 233 233 54,289 12,487,168 15.2315 6.14463 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042737 238 236 55,696 13,144,256 15.3623 6.2168 0.0041322 242 242 57,6					5.89637		205
208	206			14.3527	5.90594	0.0048544	206
209 43,681 9,129,329 14.4568 5.93447 0.0047847 209 210 44,100 9,261,000 14.4914 5.94392 0.0047619 210 211 44,521 9,393,931 14.5258 5.95334 0.0047393 211 212 24,944 9,528,128 14.5602 5.96273 0.0047170 212 213 45,369 9,663,597 14.5945 5.97209 0.0046948 213 214 45,796 9,800,344 14.6287 5.98142 0.0046729 214 215 46,225 9,938,375 14.6629 5.99073 0.0046912 215 216 46,656 10,077,696 14.6969 6.0000 0.004696 216 217 47,089 10,218,313 14.7309 6.00925 0.0046083 217 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045662 219 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044643 224 50,625 11,390,625 15.0000 6.08220 0.0044044 225 226 51,076 11,543,176 15.0333 6.09120 0.0044043 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 229 22,441 12,008,989 15.1327 6.11803 0.0043478 230 231 53,361 12,326,391 15.1987 6.16224 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 235 236 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 235 55,696 13,1		42,849		14.3875	5.91548	0.0048309	207
210	208		8,998,912	14.4222	5.92499	0.0048077	208
211	209	43,681	9,129,329	14.4568	5.93447	0.0047847	209
212 44,944 9,528,128 14,5602 5.96273 0.0047170 212 213 45,369 9,663,597 14,5945 5.97209 0.0046948 213 214 45,796 9,800,344 14,6287 5.98142 0.0046729 214 215 46,225 9,938,375 14,6629 5.99073 0.0046912 215 216 46,656 10,077,696 14,6969 6.0000 0.0046926 216 217 47,089 10,218,313 14,7309 6.0925 0.0046083 217 218 47,524 10,360,232 14,7648 6.01846 0.0045872 218 219 47,961 10,503,459 14,7986 6.0265 0.0045662 219 220 48,400 10,648,000 14,8324 6.03681 0.0045875 222 221 48,841 10,793,861 14,8661 6.04594 0.0045249 221 222 49,284 10,941,048 14,8997 6.05505 0.0045043 223 223 49,729 11,089,567 14,9332 6.06413 0.0044843 223 224 50,176 11,239,424 14,9666 6.07318 0.0044643 224 225 50,625 11,390,625 15.0000 6.08220 0.0044044 225 226 51,076 11,543,176 15.0333 6.09120 0.0044144 225 226 51,076 11,543,176 15.0333 6.09120 0.0044248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044363 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043860 228 220 52,900 12,167,000 15.1658 6.12693 0.0043178 230 231 53,361 12,326,391 15.1987 6.19579 0.0042918 233 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 236 55,6064 13,448,272 15.4272 6.19715 0.0042373 236 237 56,169 13,312,053 15.3948 6.18546 0.0042194 237 238 56,644 13,481,272 15.4272 6.19715 0.0042373 236 240 57,600 13,824,000 15.4919 6.21447 0.0041647 240 241 58,861 13,997,521 15.5563 6.23168 0.0041322 242	210	44,100			5.94392	0.0047619	210
213 45,369 9,663,597 14.5945 5.97299 0.0046948 213 214 45,796 9,800,344 14.6287 5.98142 0.0046729 214 215 46,225 9,938,375 14.6629 5.99073 0.0046512 215 216 46,656 10,077,696 14.6969 6.00000 0.0046296 216 217 47,089 10,218,313 14.7309 6.00925 0.0046083 217 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045662 219 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044843 223 225 50,625 11,390,625 15.0000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044444 225 228 51,984 11,852,352 15.0097 6.10911 0.0044953 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.19534 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.004313 232 233 54,289 12,649,337 15.2643 6.15345 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 236 55,696 13,144,256 15.3623 6.17975 0.0042735 234 237 56,169 13,314,253 15.3948 6.18546 0.0042735 235 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.22582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041694 241 242 58,564 14,172,488 15.5563 6.23168 0.0041322 242	211	44,521			5.95334		211
214 45,796 9,800,344 14.6287 5.98142 0.0046729 214 215 46,225 9,938,375 14.6629 5.99073 0.0046512 215 216 46,656 10,077,696 14.6969 6.0000 0.0046296 216 217 47,089 10,218,313 14.7309 6.00925 0.0046083 217 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045662 219 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044843 223 225 50,625 11,390,625 15.0000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044043 226 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0044856 228 229 52,441 12,008,989 15.1327 6.11803 0.004463 228 229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.68579 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,696 13,144,256 15.3623 6.1975 0.0042017 238 236 55,696 13,144,256 15.3623 6.19755 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 229 240 57,600 13,824,000 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4596 6.20582 0.004194 237 242 58,564 14,172,488 15.5563 6.23168 0.004132 242	212	44,944		14.5602	5.96273	0.0047170	212
215 46,225 9,938,375 14.6629 5.99073 0.0046512 215 216 46,656 10,077,696 14.6969 6.0000 0.0046296 216 217 47,089 10,218,313 14.7309 6.00925 0.0046883 217 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045872 218 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045843 223 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044843 223 225 50,625 11,390,625 15.0000 6.08220 0.0044844 225 226 51,076 11,543,176 15.0333 6.09120 0.0044248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.004368 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.00579 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042918 233 236 55,696 13,144,256 15.3623 6.17975 0.0042917 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041631 239 241 58,881 13,997,521 15.5563 6.23168 0.004132 242	213	45,369	9,663,597	14.5945	5.97209	0.0046948	213
216 46,656 10,077,696 14.6969 6.0000 0.0046296 216 217 47,089 10,218,313 14.7309 6.0925 0.0046083 217 218 47,524 10,360,232 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045662 219 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044643 224 224 50,176 11,239,424 14.9666 6.07318 0.0044643 224 225 50,625 11,390,625 15.0000 6.08220 0.0044044 225 226 51,076 11,543,176 15.0333 6.09120 0.0044248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043686 228 229 52,441 12,008,989 15.1327 6.11803 0.004368 229 230 52,900 12,167,000 15.1658 6.12693 0.0043178 230 231 53,361 12,326,391 15.1987 6.1853 0.0042918 232 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,696 13,144,256 15.3623 6.17975 0.0042735 234 236 55,606 13,144,256 15.3623 6.17975 0.0042737 238 239 57,121 13,651,919 15.4596 6.20582 0.0041342 242 241 58,861 13,997,521 15.5563 6.2168 0.004132 242 242 58,564 14,172,488 15.5563 6.2168 0.004132 242	214	45,796	9,800,344	14.6287	5.98142	0.0046729	214
217	215	46,225	9,938,375			0.0046512	215
218 47,524 10,360,32 14.7648 6.01846 0.0045872 218 219 47,961 10,503,459 14.7986 6.02765 0.0045662 219 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044643 224 225 50,625 11,390,625 15.0000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043268 229 231 53,361 12,326,391 15.1987 6.185345 0.0043290 231 232 53,824 12,487,168 15.2315 6.1463 0.0043290 231 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 243 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,626 13,144,256 15.3623 6.1915 0.0042918 233 253 55,696 13,144,256 15.3623 6.19715 0.004293 235 236 55,696 13,144,256 15.3623 6.19715 0.0042914 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 240 57,600 13,824,000 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4596 6.20582 0.004194 247 241 58,081 13,997,521 15.5563 6.23168 0.0041322 242	216	46,656	10,077,696	14.6969	6.∞∞∞	0.0046296	216
219 47,961 10,503,459 14.7986 6.02765 0.0045662 219 220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044843 223 225 50,625 11,390,625 15.000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044043 224 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.004368 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.00579 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.0043103 222 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,225 12,977,875 15.3297 6.17101 0.0042533 235 236 55,696 13,144,256 15.3623 6.17975 0.0042194 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041394 237 240 57,600 13,824,000 15.4919 6.21447 0.0041632 242 241 58,861 14,172,488 15.5563 6.23168 0.004132 242	217	47,089	10,218,313	14.7309		0.0046083	217
220 48,400 10,648,000 14.8324 6.03681 0.0045455 220 221 48,841 10,793,861 14.8661 6.04594 0.0045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044643 223 224 50,176 11,239,424 14.9666 6.07318 0.0044643 224 225 50,625 11,390,625 15.0000 6.08220 0.0044044 225 226 51,076 11,543,176 15.0333 6.09120 0.0044248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.6559 0.004329 231 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,225 12,977,875 15.3297 6.17101 0.0042553 235 236 55,606 13,144,256 15.3623 6.17975 0.0042194 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041342 242 240 57,600 13,824,000 15.4919 6.21447 0.0041634 241 242 58,564 14,172,488 15.5563 6.23168 0.004132 242	218	47,524	10,360,232	14.7648	6.01846	0.0045872	218
221 48,841 10,793,861 14.8661 6.04594 0.045249 221 222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.05318 0.0044843 224 225 50,625 11,399,625 15.0000 6.08220 0.044444 225 226 51,076 11,543,176 15.0333 6.09120 0.044248 226 227 51,529 11,697,083 15.0665 6.10017 0.044053 227 228 51,984 11,852,352 15.0997 6.10911 0.043860 228 229 52,441 12,068,989 15.1327 6.11803 0.043868 229 230 52,900 12,167,000 15.1658 6.12693 0.043478 230 231 53,824 12,487,168 15.2315 6.14463 0.043103 232 233 54,289 12,649,337 15.2643 <	219	47,961	10,503,459	14.7986	6.02765	0.0045662	219
222 49,284 10,941,048 14.8997 6.05505 0.0045045 222 223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044643 224 225 50,625 11,399,625 15.0000 6.08220 0.044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044053 227 227 51,529 11,697,083 15.0665 6.10017 0.0043668 229 228 51,984 11,852,352 15.0997 6.10911 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043668 229 231 53,361 12,326,391 15.1987 6.89579 0.004378 230 231 53,824 12,487,168 15.2315 6.14463 0.004373 231 233 54,756 12,812,904 15.2971 6.16224 0.0	220	48,400	10,648,000	14.8324		0.0045455	220
223 49,729 11,089,567 14.9332 6.06413 0.0044843 223 224 50,176 11,239,424 14.9666 6.07318 0.0044643 224 225 50,625 11,390,625 15.0000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.005379 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.0043303 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,225 12,977,875 15.3927 6.17101 0.0042553 235 236 55,696 13,144,256 15.3623 6.19575 0.0042914 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041322 242 241 58,081 13,997,521 15.5242 6.2330 0.0041322 242	221	48,841	10,793,861	14.8661	6.04594	0.0045249	221
224 50,176 11,239,424 14.9666 6.07318 0.0044643 224 225 50,625 11,390,625 15.000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.004248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.6579 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,225 12,977,875 15.3297 6.17101 0.0042553 235 236 55,696 13,144,256 15.3623 6.17975 0.0042914 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041632 242 241 58,861 13,997,521 15.5242 6.2308 0.0041392 242 258,564 14,172,488 15.5563 6.23168 0.0041322 242	222	49,284	10,941,048	14.8997	6.05505	0.0045045	222
225 50,625 11,390,625 15.0000 6.08220 0.0044444 225 226 51,076 11,543,176 15.0333 6.09120 0.0044248 226 227 51,529 11,697,083 15.0665 6.10017 0.0044248 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043478 230 231 53,361 12,326,391 15.1987 6.00579 0.0043478 230 231 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,225 12,977,875 15.3623 6.17975 0.0042735 235 236 55,696 13,144,256 15.3623 6.17975	223	49,729	11,089,567	14.9332	6.06413	0.0044843	223
226	224	50,176	11,239,424	14.9666		0.0044643	224
227 51,529 11,697,083 15.0665 6.10017 0.0044053 227 228 51,984 11,852,352 15.0997 6.10911 0.0043860 228 229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.12693 0.0043478 230 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,225 12,977,875 15.3297 6.17101 0.0042553 235 236 55,696 13,144,256 15.3623 6.17975 0.0042373 236 237 56,169 13,312,053 15.3948 6.18846 0.0042194 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041667 240 241 58,081 13,997,521 15.5242 6.2308 0.0041322 242 258,564 14,172,488 15.5563 6.23168 0.0041322 242	225	50,625	11,390,625	15.0000	6.08220	0.0044444	225
228 \$1,984 \$1,852,352 \$15.0997 6.10911 0.0043860 228 229 \$2,441 \$12,008,989 \$15.1327 6.11803 0.0043668 229 230 \$2,900 \$12,167,000 \$15.1658 6.12693 0.0043478 230 231 \$3,361 \$12,326,391 \$15.1987 6.62579 0.0043290 231 232 \$3,824 \$12,487,168 \$15.2315 6.14463 0.0043103 232 233 \$4,289 \$12,649,337 \$15.2643 6.15345 0.0042918 233 234 \$4,756 \$12,812,904 \$15.2971 6.16224 0.0042735 234 235 \$5,225 \$12,977.875 \$15.3623 6.17010 0.0042733 236 236 \$5,696 \$13,144,256 \$15.3623 6.18846 0.0042737 236 237 \$6,169 \$13,144,256 \$15.3948 6.18846 0.0042017 238 238 \$6,644 \$13,481,272 \$15.4272 6.19	226	51,076				0.0044248	226
229 52,441 12,008,989 15.1327 6.11803 0.0043668 229 230 52,900 12,167,000 15.1658 6.12693 0.0043478 230 231 53,361 12,326,391 15.1987 6.69579 0.0043290 231 232 53,824 12,487,168 15.2315 6.14463 0.0043103 232 233 54,289 12,649,337 15.2643 6.15345 0.0042918 233 234 54,756 12,812,904 15.2971 6.16224 0.0042735 234 235 55,225 12,977.875 15.3297 6.17101 0.0042735 235 236 55,696 13,144,256 15.3623 6.17975 0.0042373 236 237 56,169 13,312,053 15.3948 6.18546 0.0042194 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041661 240 241 58,081 13,997,521 15.5242 6.23308 0.0041392 242 242 58,564 14,172,488 15.5563 6.23168 0.0041322 242		51,529		15.0665		0.0044053	227
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	228	51,984	11,852,352	15.0997	6.10911	0.0043860	228
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	229					0.0043668	229
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	230					0.0043478	230
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	231					0.0043290	231
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	232	53,824	12,487,168			0.0043103	232
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	233						233
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	234	54,756		15.2971		0.0042735	234
237 56,169 13,312,053 15.3948 6.18846 0.0042194 237 238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041667 240 241 58,081 13,997,521 15.5242 6.2308 0.0041494 241 242 58,564 14,172,488 15.5563 6.23168 0.0041322 242							
238 56,644 13,481,272 15.4272 6.19715 0.0042017 238 239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041667 240 241 58,081 13,997,521 15.5242 6.22308 0.0041494 241 242 58,564 14,172,488 15.5563 6.23168 0.0041322 242	236						236
239 57,121 13,651,919 15.4596 6.20582 0.0041841 239 240 57,600 13,824,000 15.4919 6.21447 0.0041667 240 241 58,081 13,997,521 15.5242 6.22308 0.0041494 241 242 58,564 14,172,488 15.5563 6.23168 0.0041322 242							
240 57,600 13,824,000 15.4919 6.21447 0.0041667 240 241 58,081 13,997,521 15.5242 6.22308 0.0041494 241 242 58,564 14,172,488 15.5563 6.23168 0.0041322 242							-
241 58,081 13,997,521 15.5242 6.22308 0.0041494 241 242 58,564 14,172,488 15.5563 6.23168 0.0041322 242							
242 58,564 14,172,488 15.5563 6.23168 0.0041322 242							
							24I
243 59,049 14,348,907 15.5885 6.24025 0.0041152 243							
244 59,536 14,526,784 15.6205 6.24880 0.0040984 244							
245 60,025 14,706,125 15.6525 6.25732 0.0040816 245							
246 60,516 14,886,936 15.6844 6.26583 0.0040650 246							
247 61,009 15,069,223 15.7162 6.27431 0.0040486 247							
248 61,504 15,252,992 15.7480 6.28276 0.0040323 248							· ·
249 62,001 15,438,249 15.7797 6.29119 0.0040161 249							
250 62,500 15,625,000 15.8114 6.29961 0.0040000 250	250	62,500	15,625,000	15.8114	0.2996I	0.0040000	250

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
251	63,001	15,813,251	15.8430	6.30799	0.0039841	251
252	63,504	16,003,008	15.8745	6.31636	0.0039683	252
253	64,009	16,194,277	15.9060	6.32470	0.0039526	253
254	64,516	16,387,064	15.9374	6.33303	0.0039370	254
255	65,025	16,581,375	15.9687	6.34133	0.0039216	255
256	65,536	16,777,216	16.0000	6.34960	0.0039063	256
257	66,049	16,974,593	16.0312	6.35786	0.0038911	257
258	66,564	17,173,512	16.0624	6.36610	0.0038760	258
259	67,081	17,373,979	16.0935	6.37431	0.0038610	259
260	67,600	17,576,000	16.1245	6.38250	0.0038462	260
261	68,121	17,779,581	16.1555	6.39068	0.0038314	261
262	68,644	17,984,728	16.1864	6.39883	0.0038168	262
263	69,169	18,191,447	16.2173	6.40696	0.0038023	263
264	69,696	18,399,744	16.2481	6.41507	0.0037879	264
265	70,225	18,609,625	16.2788	6.42316	0.0037736	265
266	70,756	18,821,096	16.3095	6.43123	o.∞37594	266
267	71,289	19,034,163	16.3401	6.43928	0.0037453	267
268	71,824	19,248,832	16.3707	6.44731	0.0037313	268
269	72,361	19,465,109	16.4012	6.45531	0.0037175	269
270	72,900	19,683,000	16.4317	6.46330	0.0037037	270
27 I	73,441	19,902,511	16.4621	6.47127	o.oo36900	271
272	73,984	20,123,648	16.4924	6.47922	ი.∞36765	272
273	74,529	20,346,417	16.5227	6.48715	o. 003663 0	273
274	75,076	20,570,824	16.5529	6.49507	o.∞36496	274
275	75,625	20,796,875	16.5831	6.50296	0.0036364	275
276	76,176	21,024,576	16.6132	6.51083	0.0036232	276
277	76,729	21,253,933	16.6433	6.51868	0.0036101	277
278	77,284	21,484,952	16.6733	6.52652	0.0035971	278
279	77,841	21,717,639	16.7033	6.53434	0.0035842	279
280	78,400	21,952,000	16.7332	6.54213	0.0035714	280
281	78,961	22,189,041	16.7631	6.54991	0.0035587	281
282	79,524	22,425,768	16.7929	6.55767	0.0035461	282
283	80,089	22,665,187	16.8226	6.56541	0.0035336	283
284	80,656	22,906,304	16.8523	6.57314	0.0035211	284
285	81,225	23,149,125	16.8819	6.58084	0.0035088	285
286	81,796	23,393,656	16.9115	6.58853	0.0034965	286
287	82,369	23,639,903	16.9411	6.59620	0.0034843	287
288	82,944	23,887,872	16.9706	6.60385	0.0034722	288
289	83,521	24,137,569	17.0000	6.61149	0.0034602	289
290	84,100	24,389,000	17.0294	6.61911	0.0034483	290
291	84,681	24,642,171	17.0587	6.62671	0.0034364	291
292	85,264	24,897,088	17.0880	6.63429	0.0034247	292
293	85,849	25,153,757	17.1172	6.64185	0.0034130	293
294	86,436	25,412,184	17.1464	6.64940	0.0034014	294
295	87,025	25,672,375	17.1756	6.65693	0.0033898	295
296	87,616	25,934,336	17.2047	6.66444	0.0033784	296 297
297	88,209	26,198,073	17.2337	6.67194	0.0033670	297
298	88,804	26,463,592	17.2627	6.67942	0.0033557	
299	89,401 90,000	26,730,899	17.2916	6.68688	0.0033445	299 300
300	90,000	27,000,000	17.3205	6.69433	0.0033333	300

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
301	90,601	27,270,901	17.3494	6.70176	0.0033223	301
302	91,204	27,543,608	17.3781	6.70917	0.0033113	302
303	91,809	27,818,127	17.4069	6.71657	0.0033003	303
304	92,416	28,094,464	17.4356	6.72395	0.0032895	304
305	93,025	28,372,625	17.4642	6.73132	0.0032787	305
306	93,636	28,652,616	17.4929	6.73866	0.0032680	306
307	94,249	28,934,443	17.5214	6.74600	0.0032573	307
308	94,864	29,218,112	17.5499	6.75331	0.0032468	308
309	95,481	29,503,629	17.5784	6.76o61	0.0032362	309
310	96,1∞	29,791,000	17.6068	6.76790	0.0032258	310
311	96,721	30,080,231	17.6352	6.77517	0.0032154	311
312	97,344	30,371,328	17.6635	6.78242	0.0032051	312
313	97,969	30,664,297	17.6918	6.78966	0.0031949	313
314	98,596	30,959,144	17.7200	6.79688	0.0031847	314
315	99,225	31,255,875	17.7482	6.80400	0.0031746	315
316	99,856	31,554,496	17.7764	6.81128	0.0031646	316
317	100,489	31,855,013	17.8045	6.81846	0.0031546	317
318	101,124	32,157,432	17.8326	6.82562	0.0031447	318
319	101,761	32,461,759	17.8606	6.83277	0.0031348	319
320	102,400	32,768,000	17.8885	6.83990	0.0031250	320
321	103,041	33,076,161	17.9165	6.84702	0.0031153	321
322	103,684	33,386,248	17.9444	6.85412	0.0031056	322
323	104,329	33,698,267	17.9722	6.86121	0.0030960	323
324	104,976	34,012,224	18.0000	6.86829	0.0030864	324
325	105,625	34,328,125	18.0278	6.87534	0.0030769	325
326	106,276	34,645,976	18.0555	6.88239	0.0030675	326
327	106,929	34,965,783	18.0831	6.88942	0.0030581	327
328	107,584	35,287,552	18.1108	6.89643	0.0030488	328
329	108,241	35,611,289	18.1384	6.90344	0.0030395	329
330	108,900	35,937,∞∞	18.1659	6.91042	0.0030303	330
331	109,561	36,264,691	18.1934	6.91740	0.0030211	331
332	110,224	36,594,368	18.2209	6.92436	0.0030120	332
333	110,889	36,926,037	18.2483	6.93131	0.0030030	333
334	111,556	37,259,704	18.2757	6.93823	0.0029940	334
335	112,225	37,595,375	18.3030	6.94515	0.0029851	335
336	112,896	37,933,056	18.3303	6.95205	0.0029762	336
337	113,569	38,272,753	18.3576	6.95894	0.0029674	337
338	114,244	38,614,472	18.3848	6.96582	0.0029586	338
339	114,921	38,958,219	18.4120	6.97268	0.0029499	339
340	115,600	39,304,000	18.4391	6.97953	0.0029412	340
341	116,281	39,651,821	18.4662	6.98637	0.0029326	341
342	116,964	40,001,688	18.4932	6.99319	0.0029240	342
343	117,649	40,353,607	18.5203	7.00000	0.0029155	343
344	118,336	40,707,584	18.5472	7.00680	0.0029070	344
345	119,025	41,063,625	18.5742	7.01358	0.0028986	345
346	119,716	41,421,736	18.6011	7.02035	0.0028902	346
347	120,409	41,781,923	18.6279	7.02711	0.0028818	347
348	121,104	42,144,192	18.6548	7.03385	0.0028736	348
349	121,801	42,508,549	18.6815	7.04059	0.0028653	349
350	122,500	42,875,000	18.7083	7.04730	0.0028571	350
		1		, ., .,		

Powers, Roots and Reciprocals

		T	T			
No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
351	123,201	43,243,551	18.7350	7.05400	0.0028490	351
352	123,904	43,614,208	18.7617	7.06070	0.0028409	352
353	124,609	43,986,977	18.7883	7.06738	0.0028329	353
354	125,316	44.361,864	18.8149	7.07404	0.0028249	354
355	126,025	44,738,875	18.8414	7.08070	0.0028169	355
356	126,736	45,118,016	18.8680	7.08734	0.0028090	356
357	127.449	45,499,293	18.8944	7.09397	0.0028011	357
358	128,164	45,882,712	18.9209	7.10059	0.0027933	358
359	128,881	46,268,279	18.9473	7.10719	0.0027855	359
360	129,600	46,656,000	18.9737	7.11379	0.0027778	360
36r	130,321	47,045,881	19.0000	7.12037	0.0027701	361
362	131,044	47,437,928	19.0263	7.12694	0.0027624	362
363	131,769	47,832,147	19.0526	7.13349	0.0027548	363
364	132,496	48,228,544	19.0788	7.14004	0.0027473	364
365	133,225	48,627,125	19.1050	7.14657	0.0027397	365
366	133,956	49,027,896	19.1311	7.15309	0.0027322	366
367	134,689	49,430,863	19.1572	7.15960	0.0027248	367
368	135.424	49,836,032	19.1833	7.16610	0.0027174	368
369	136,161	50,243,409	19.2094	7.17258	0.0027100	369
370	136,9∞	50,653,000	19.2354	7.17905	0.0027027	370
371	137,641	51,064,811	19.2614	7.18552	0.0026954	371
372	138,384	51,478,848	19.2873	7.19197	0.0026882	372
373	139,129	51,895,117	19.3132	7.19841	0.0026810	373
374	139,876	52,313,624	19.3391	7.20483	0.0026738	374
375	140,625	52,734,375	19.3649	7.21125	0.0026667	375
376	141,376	53,157,376	19.3907	7.21765	0.0026596	376
377	142,129	53,582,633	19.4165	7.22405	0.0026525	377
378	142,884	54,010,152	19.4422	7.23043	0.0026455	378
379	143,641	54,439,939	19.4679	7.23680	0.0026385	379
380	144,400	54,872,000	19.4936	7.24316	0.0026316	380
381	145,161	55,306,341	19.5192	7.24950	0.0026247	381
382	145,924	55,742,968	19.5448	7.25584	0.0026178	382
383	146,689	56,181,887	19.5704	7.26217	0.0026110	383
384	147,456	56,623,104	19.5959	7.26848	0.0026042	384
385	148,225	57,066,625	19.6214	7 - 27479	0.0025974	385
386	148,996	57,512,456	19.6469	7.28108	0.0025907	386
387	149,769	57,960,603	19.6723	7.28736	0.0025840	387
388	150,544	58,411,072	19.5977	7.29363	0.0025773	388
389	151,321	58,863,869	19.7231	7.29989	0.0025707	389
390	152,100	59,319,000	19.7484	7.30614	0.0025641	390
391	152,881	59,776,471	19.7737	7.31238	0.0025575	391
392	153,664	60,236,288	19.7990	7.31861	0.0025510	392
393	154,449	60,698,457	19.8242	7.32483	0.0025445	393
394	155,236	61,162,984	19.8494	7.33104	0.0025381	394
395	156,025	61,629,875	19.8746	7.33723	0.0025316	395
396	156,816	62,099,136	19.8997	7 · 34342	0.0025253	396
397	157,609	62,570,773	19.9249	7.34960	0.0025189	397
398	158,404	63,044,792	19.9499	7.35576	0.0025126	398
399	159,201	63,521,199	19.9750	7.36192	0.0025063	399
400	160,000	64,000,000	20.0000	7.36806	0.0025000	4∞

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
401	160,801	54,481,201	20.0250	7.37429	0.0024938	401
402	161,604	64,964,808	20.0499	7.38032	0.0024876	402
403	162,409	65,450,827	20.0749	7.38644	0.0024814	403
404	163,216	65,939,264	20.0998	7.39254	0.0024752	404
405	164,025	66,430,125	20.1246	7.39864	0.0024691	405
406	164,836	66,923,416	20. 1494	7.40472	0.0024631	406
407	165,649	67,419,143	20.1742	7.41080	0.0024570	407
408	166,464	67,917,312	20.1990	7.41686	0.0024510	408
409	167,281	68,417,929	20.2237	7.42291	0.0024450	409
410	168,100	68,921,000	20.2485	7.42896	0.0024390	410
411	168,921	69,426,531	20.2731	7 - 43499	0.0024331	411
412	169,744	69,934,528	20,2978	7.44102	0.0024272	412
413	170,569	70,444,997	20.3224	7 - 44703	0.0024213	413
414	171,396	70,957,944	20.3470	7 - 45304	0.0024155	414
415	172,225	71,473,375	20.3715	7 - 45904	0.0024096	415
416	173,056	71,991,296	20.3961	7.46502	0.0024038	416
417	173,889	72,511,713	20.4206	7.47100	0.0023981	417
418	174,724	73,034,632	20.4450	7.47697	0.0023923	418
419	175,561	73,560,059	20.4695	7.48292	0.0023866	419
420	176,4∞	74,088,000	20.4939	7.48887	0.0023810	420
421	177,241	74,618,461	20.5183	7.49481	0.0023753	421
422	178,084	75,151,448	20.5426	7.50074	0.0023697	422
423	178,929	75,686,967	20.5670	7.50666	0.0023641	423
424	179,776	76,225,024	20.5913	7.51257	0.0023585	424
425	180,625	76,765,625	20.6155	7.51847	0.0023529	425
426	181,476	77,308,776	20.6398	7.52437	0.0023474	426
427	182,329	77,854,483	20.6640	7.53025	0.0023419	427
428	183,184	78,402,752	20.6882	7.53612	0.0023364	428
429	184,041	78,953,589	20.7123	7.54199	0.0023310	429
430	184,9∞	79,507,000	20.7364	7 . 54784	0.0023256	430
431	185,761	80,062,991	20.7605	7.55369	0.0023202	431
432	186,624	80,621,568	20.7846	7 - 55953	0.0023148	432
433	187,489	81,182,737	20.8087	7.56535	0.0023095	433
434	188,356	81,746,504	20.8327	7.57117	0.0023041	434
435	189,225	82,312,875	20.8567	7.57698	0.0022989	435
436	190,096	82,881,856	20.8806	7.58279	0.0022936	436
437	190,969	83,453,453	20.9045	7.58858	0.0022883	437
438	191,844	84,027,672	20.9284	7.59436	0.0022831	438
439	192,721	84,604,519	20.9523	7.60014	0.0022779	439
440	193,600	85,184,000	20.9762	7.60590	0.0022727	440
441	194,401	86,350,888	21.0000	7.61741	0.0022624	441 442
442	195,304	86,938,307	21.0236	7.62315	0.0022573	443
443 444	190,249	87,528,384	21.04/0	7.62888	0.0022523	443
444	197,130	88,121,125	21.0950	7.63461	0.0022472	444
445	198,916	88,716,536	21.1187	7.64032	0.0022472	446
447	199,809	89,314,623	21.1424	7.64603	0.0022371	447
448	200,704	89,915,392	21.1660	7.65172	0.0022321	448
149	201,601	90,518,849	21.1896	7.65741	0.0022272	449
450	202,500	91,125,000	21.2132	7.66309	0.0022222	450
1 430	1,300	3-,3,000		,		730

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
451	203,401	91,733,851	21.2368	7.66877	0.0022173	451
452	204,304	92,345,408	21.2603	7.67443	0.0022124	452
453	205,209	92,959,677	21.2838	7.68009	0.0022075	453
454	206,116	93,576,664	21.3073	7.68573	0.0022026	454
455	207,025	94,196,375	21.3307	7.69137	0.0021978	455
456	207,936	94,818,816	21.3542	7.69700	0.0021930	456
457	208,849	95,443,993	21.3776	7.70262	0.0021882	457
458	209,764	96,071,912	21.4009	7.70824	0.0021834	458
459	210,681	96,702,579	21.4243	7.71384	0.0021786	459
460	211,600	97,336,000	21.4476	7.71944	0.0021739	460
461	212,521	97,972,181	21.4709	7.72503	0.0021692	461
462	213,444	98,611,128	21.4942	7.73061	0.0021645	462
463	214,369	99,252,847	21.5174	7.73619	0.0021598	463
464	215,296	99,897,344	21.5407	7.74175	0.0021552	464
465	216,225	100,544,625	21.5639	7.74731	0.0021505	465
466	217,156	101,194,696	21.5870	7.75286	0.0021459	466
467	218,089	101,847,563	21.6102	7.75840	0.0021413	467
468	219,024	102,503,232	21.6333	7.76394	0.0021368	468
469	219,961	103,161,709	21.6564	7.76946	0.0021322	469
470	220,900	103,823,000	21.6795	7.77498	0.0021277	470
471	221,841	104,487,111	21.7025	7.78049	0.0021231	47 I
472	222,784	105,154,048	21.7256	7.78599	0.0021186	472
473	223,729	105,823,817	21.7486	7.79149	0.0021142	473
474	224,676	106,496,424	21.7715	7.79697	0.0021097	474
475	225,625	107,171,875	21.7945	7.80245	0.0021053	475
476	226,576	107,850,176	21.8174	7.80793	0.0021008	476
477	227,529	108,531,333	21.8403	7.81339	0.0020964	477
478	228,484	109,215,352	21.8632	7.81885	0.0020921	478
479	229,441	109,902,239	21.8861	7.82429	0.0020877	479
480	230,400	110,592,000	21.9089	7.82974	0.0020833	480
481	231,361	111,284,641	21.9317	7.83517	0.0020790	481
482	232,324	111,980,168	21.9545	7.84059	0.0020747	482
483	233,289	112,678,587	21.9773	7.84601	0.0020704	483
484	234,256	113,379,904	22.0000	7.85142	0.0020661	484
485	235,225	114,084,125	22.0227	7.85683	0.0020619	485
486	236,196	114,791,256	22.0454	7.86222	0.0020576	486
487	237,169	115,501,303	22.0681	7.86761	0.0020534	487
488	238,144	116,214,272	22.0907	7.87299	0.0020492	488
489	239,121	116,930,169	22.1133	7.87837	0.0020450	489
490	240,100	117,649,000	22.1359	7.88374	0.0020408	490
491	241,081	118,370,771	22.1585	7.88909	0.0020367	491
492	242,064	119,095,488	22.1811	7.89445	0.0020325	492
493	243,049	119,823,157	22.2036	7.89979	0.0020284	493
494	244,036	120,553,784	22.2261	7.90513	0.0020243	494
495	245,025	121,287,375	22.2486	7.91046	0.0020202	495
496	246,016	122,023,936	22.2711	7.91578	0.0020161	496
497	247,009	122,763,473	22.2935	7.92110	0.0020121	497
498	248,004	123,505,992	22.3159	7.92641	0.0020080	498
499	249,001	124,251,499	22.3383	7.93171	0.0020040	499
500	250,000	125,000,000	22.3607	7.93701	0.0020000	500
1	1 -	-	1		1	

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
501	251,∞1	125,751,501	22.3830	7.94229	0.0019960	501
502	252,004	126,506,∞8	22.4054	7.94757	0.0019920	502
503	253,∞9	127,263,527	22.4277	7.95285	0.0019881	503
504	254,016	128,024,064	22.4499	7.95811	0.0019841	504
505	255,025	128,787,625	22.4722	7.96337	0.0019802	505
506	256,036	129,554,216	22.4944	7.96863	0.0019763	506
507	257,049	130,323,843	22.5167	7.97387	0.0019724	507
508	258,064	131,096,512	22.5389	7.97911	0.0019685	508
509	259,081	131,872,229	22.5610	7.98434	0.0019646	509
510	260,100	132,651,000	22.5832	7 .98957	0.0019608	510
511	261,121	133,432,831	22.6053	7.99479	0.0019569	511
512	262,144	134,217,728	22.6274	8.00000	0.0019531	512
513	263,169	135,005,697	22.6495	8.00520	0.0019493	513
514	264,196	135,796,744	22.6716	8.01040	0.0019455	514
515	265,225	136,590,875	22.6936	8.01559	0.0019417	515
516	266,256	137,388,096	22.7156	8.02078	0.0019380	516
517	267,289	138,188,413	22.7376	8.02596	0.0019342	517
518	268,324	138,991,832	22.7596	8.03113	0.0019305	518
519	269,361	139,798,359	22.7816	8.03629	0.0019268	519
520	270,4∞	140,608,000	22.8035	8.04145	0.0019231	520
521	271,441	141,420,761	22.8254	8.04660	0.0019194	521
522	272,484	142,236,648	22.8473	8.05175	0.0019157	522
523	273,529	143,055,667	22.8692	8.05689	0.0019120	523
524	274,576	143,877,824	22.8910	8.06202	0.0019084	524
525	275,625	144,703,125	22.9129	8.06714	0.0019048	525
526	276,676	145,531,576	22.9347	8.07226	0.0019011	526
527	277,729	146,363,183	22.9565	8.07737	0.0018975	527
528	278,784	147,197,952	22.9783	8.08248	0.0018939	528
529	279,841	148,035,889	23.0000	8.08758	0.0018904	529
530	280,900	148,877,000	23.0217	8.09267	0.∞18868	530
531	281,961	149,721,291	23.0434	8.09776	0.0018832	531
532	283,024	150,568,768	23.0651	8.10284	0.018797	532
533	284,089	151,419,437	23.0868	8.10791	0.0018762	533
534	285,156	152,273,304	23.1084	8.11298	0.0018727	534
535	286,225	153,130,375	23.1301	8.11804	0.0018692	535
536	287,296	153,990,656	23.1517	8.12310	0.0018657	536
537	288,369	154,854,153	23.1733	8.12814	0.0018622	537
538	289,444	155,720,872	23.1948	8.13319	0.0018587	538
539	290,521	156,590,819	23.2164	8.13822	0.0018553 0.0018519	539
540	291,600 292,681	157,464,000	23.2379	8.14325 8.14828	0.0018484	540
541 542	292,081	158,340,421	23.2594 23.2809	8.15329	0.0018450	541
• .			1	8.15831	0.0018416	542
543 544	294,849 295,936	160,103,007 160,989,184	23.3024	8.16331	0.0018382	543 544
544 545	295,930	161,878,625	23.3230	8. 16831	0.0018349	544
545 546	297,025	162,771,336	23.3452	8.17330	0.0018315	545 546
547	299,209	163,667,323	23.3880	8.17829	0.0018282	547
548	300,304	164,566,592	23.4094	8.18327	0.0018248	547 548
549	301,401	165,469,149	23.4307	8.18824	0.0018215	549
550	302,500	166,375,000	23.4521	8.19321	0.0018182	550
333	502,500	-50,575,000	-3.43-1	3119321	2.0010101	330

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
551	303,601	167,284,151	23.4734	8.19818	0.0018149	551
552	304,704	168,196,608	23 - 4947	8.20313	0.0018116	552
553	305,809	169,112,377	23.5160	8.20808	0.0018083	553
554	306,916	170,031,464	23.5372	8.21303	0.0018051	554
555	308,025	170,953,875	23.5584	8.21797	0.0018018	555
556	309,136	171,879,616	23 - 5797	8.22290	0.0017986	556
557	310,249	172,808,693	23.6008	8.22783	0.0017953	557
558	311,364	173,741,112	23.6220	8.23275	0.0017921	558
559	312,481	174,676,879	23.6432	8. 23766	0.0017889	559
560	313,6∞	175,616,000	23.6643	8.24257	0.0017857	560
561	314,721	176,558,481	23.6854	8.24747	0.0017825	561
562	315,844	177,504,328	23.7065	8.25237	0.0017794	562
563	316,969	178,453,547	23.7276	8.25726	0.0017762	563
564	318,096	179,406,144	23.7487	8.26215	0.0017731	564
565	319,225	180,362,125	23.7697	8.26703	0.∞17699	565
566	320,356	181,321,496	23.7908	8.27190	0.∞17668	566
567	321,489	182,284,263	23.8118	8.27677	0.0017637	567
568	322,624	183,250,432	23.8328	8.28163	0.0017606	568
569	323,761	184,220,009	23.8537	8.28649	0.0017575	569
570	324,900	185,193,000	23.8747	8.29134	0.0017544	570
571	326,041	186,169,411	23.8956	8.29619	0.0017513	571
572	327,184	187,149,248	23.9165	8.30103	0.0017483	572
573	328,329	188,132,517	23.9374	8.30587	0.0017452	573
574	329,476	189,119,224	23.9583	8.31069	0.0017422	574
575	330,625	190,109,375	23.9792	8.31552	0.0017391	575
576	331,776	191,102,976	24.0000	8.32034	0.0017361	576
577	332,929	192,100,033	24.0208	8.32515	0.0017331	577
578	334,084	193,100,552	24.0416	8.32995	0.0017301	578
579	335,241	194,104,539	24.0624	8.33476	0.0017271	579
580	336,400	195,112,000	24.0832	8.33955	0.0017241	580
581	337,561	196,122,941	24.1039	8.34434	0.0017212	581
582	338,724	197,137,368	24.1247	8.34913	0.0017182	582
583	339,889	198,155,287	24.1454	8.35390	0.0017153	583
584	341,056	199,176,704	24.1661	8.35868	0.0017123	584
585	342,225	200,201,625	24.1868	8.36345	0.0017094	585
586	343,396	201,230,056	24.2074	8.36821	0.0017065	586
587	344,569	202,262,003	24.2281	8.37297	0.0017036	587
588	345,744	203,297,472	24.2487	8.37772	0.0017007	588
589	346,921	204,336,469	24.2693	8.38247	0.0016978	589
590	348,1∞	205,379,000	24.2899	8.38721	0.∞16949	590
591	349,281	206,425,071	24.3105	8.39194	0.0016920	591
592	350,464	207,474,688	24.3311	8.39667	0.0016892	592
593	351,649	208,527,857	24.3516	8.40140	0.0016863	593
594	352,836	209,584,584	24.3721	8.40612	0.0016835	594
595	354,025	210,644,875	24.3926	8.41083	0.0016807	595
596	355,216	211,708,736	24.4131	8.41554	0.0016779	596
597	356,409	212,776,173	24.4336	8.42025	0.0016750	597
598	357,604	213,847,192	24.4540	8.42494	0.0016722	598
599	358,801	214,921,799	24-4745	8.42964	0.0016694	599
6∞	360,0∞	216,000,000	24.4949	8.43433	0.∞16667	600
	,	,				

No. Square Cube Sq. Root Cube Root Reciprocal No. 601 361,201 217,081,801 24,5153 8,43901 0.0016639 601 602 362,404 218,167,208 24,5351 8,44369 0.0016536 602 603 363,609 219,256,227 24,5764 8,45303 0.0016536 604 605 366,025 221,445,125 24,6374 8,45303 0.0016329 605 606 366,025 221,445,125 24,6374 8,47690 0.001647 607 608 369,664 223,648,543 24,6374 8,47629 0.001647 607 609 370,881 225,866,529 24,6779 8,47629 0.0016420 609 610 372,100 226,981,000 24,6982 8,4903 0.0016370 612 611 373,331 240,290,32 24,7888 8,49481 0.0016370 612 613 375,509 230,346,397 24,7988 8,49481 <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th>							
602 362,404 218,167,208 24,5337 8.44369 0.001651 602 603 363,609 219,256,227 24,5561 8.44836 0.0016584 603 604 364,816 220,348,864 24,5764 8.45303 0.0016529 605 605 366,025 221,445,125 24,5916 8.45769 0.0016529 605 606 367,236 223,648,543 24,6777 8.47165 0.0016474 608 608 369,664 224,755,712 24,6577 8.47169 0.0016474 608 610 372,100 226,681,529 24,6779 8.47629 0.0016474 609 611 373,321 228,099,131 24,788 8.49830 0.0016367 611 612 374,544 229,220,928 24,7386 8.49181 0.0016340 612 613 375,769 230,346,397 24,7588 8.49481 0.0016340 612 613 378,225 23,608,375 24,799 8.5946	No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
602 362,404 218,167,208 24,5357 8,44369 0.∞16514 602 603 363,609 219,756,277 24,5561 8,44369 0.∞16584 603 604 364,816 220,348,864 24,5764 8,45303 0.∞16526 605 605 366,025 221,445,125 24,5967 8,45769 0.∞16529 605 606 367,236 223,648,543 24,6779 8,47690 0.∞16474 608 608 369,664 224,755,712 24,6577 8,47165 0.∞16474 608 609 370,881 225,866,529 24,6779 8,47699 0.∞16420 609 610 372,100 226,981,000 24,6982 8,48939 0.∞16393 610 611 373,321 228,999,131 24,7188 8,49181 0.∞16393 611 613 375,769 230,346,397 24,7386 8,49181 0.∞16373 613 613 375,252 23,608,375 24,7992 8,5924	109	361,201	217,081,801	24.5153	8.43901	0.0016639	601
603 363,609 219,256,227 24,5561 8,44836 0.0016556 603 604 364,816 220,348,864 24,5764 8.45303 0.0016556 604 364,816 220,348,864 24,5764 8.45305 0.0016556 605 366,025 221,445,125 24,5967 8.45769 0.0016529 605 606 367,236 222,545,016 24,6171 8.46235 0.0016529 605 607 368,449 223,648,543 24,6374 8.46700 0.0016474 607 608 369,664 224,755,712 24,6577 8.47165 0.0016474 607 608 372,100 226,981,000 24,6982 8.48093 0.0016393 610 372,100 226,981,000 24,6982 8.48093 0.0016393 610 373,321 228,099,131 24,7184 8.485,56 0.0016367 611 373,321 228,099,131 24,7184 8.49855 0.0016367 611 376,996 231,475,544 24,7790 8.49912 0.0016313 613 375,769 230,346,397 24,7588 8.49481 0.0016313 613 375,996 231,475,544 24,7790 8.49912 0.0016260 615 616 379,456 233,744,896 24,8193 8.50864 0.0016260 615 617 380,689 234,885,113 24,8395 8.51324 0.0016267 617 618 381,924 236,029,032 24,8396 8.51784 0.0016267 617 618 381,924 236,029,032 24,8396 8.51784 0.0016267 617 618 381,924 236,029,032 24,8396 8.51784 0.0016267 617 618 618 381,924 240,641,848 24,9399 8.53160 0.0016123 618 618 622 386,884 240,641,848 24,9399 8.53160 0.0016123 622 385,684 240,641,848 24,9399 8.53160 0.0016123 622 386,884 240,641,848 24,9399 8.53160 0.0016123 622 389,375 244,140,625 25.0000 8.54959 0.001697 622 623 391,876 244,140,625 25.0000 8.54959 0.0015974 626 627 393,129 246,491,883 25.0000 8.55899 0.0015974 626 628 394,384 247,673,152 25.0599 8.56808 0.0015888 629 395,641 248,858,189 25.0799 8.56808 0.001593 633 396,900 250,047,000 25.0998 8.59654 0.0015974 626 624 649,496 257,259,456 25.1990 8.5975 0.0015773 636 644 414,965 257,259,456 25.1990 8.59654 0.0015974 626 624 441,40,681 255,436,137 25.1992 8.59524 0.0015773 636 644 414,965 256,647,875 25.1992 8.59654 0.0015974 626 644 410,881 266,487,777 25.3574 8.6356 0.0015735 642 644 414,736 266,988 25.1396 8.6401 0.0015575 642 644 414,736 266,988 25.3377 8.62671 0.0015575 642 644 414,736 266,988 25.3377 8.62671 0.0015575 642 644 414,736 266,988 25.3377 25.4558 8.6459 0.0015408 649 421,201 273,359,449 25.4555 8.65595 0.0015408 64	602		218,167,208			0.0016611	602
604 364,816 220,348,864 24.5764 8.45303 0.0016525 604 605 366,025 221,445,125 24.5967 8.45769 0.0016529 605 606 367,236 222,545,016 24.6171 8.46235 0.0016529 605 607 368,449 223,648,543 24.6374 8.46700 0.0016474 607 608 369,664 224.755,712 64.6577 8.47165 0.0016447 608 609 370,881 225,866,529 24.6579 8.47629 0.0016420 609 370,881 225,866,529 24.6779 8.47629 0.0016420 609 610 372,100 226,981,000 24.6982 8.48093 0.0016393 610 611 373,321 228,099,131 24.7184 8.48556 0.0016340 611 374,544 229,220,928 24.7588 8.49481 0.0016313 613 613 375,769 230,346,397 24.7588 8.49481 0.0016313 613 614 376,996 231,475,544 24.7790 8.49942 0.0016287 614 615 378,225 232,608,375 24.7992 8.5040 0.0016260 616 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.001626 619 383,161 237,176,659 24.8797 8.52243 0.0016155 619 620 384,400 238,328,000 24.8988 8.52702 0.0016155 619 620 384,400 238,338,001 24.9199 8.53160 0.0016155 619 622 386,884 240,641,848 24.9399 8.53618 0.0016077 622 386,884 240,641,848 24.9399 8.53618 0.0016077 622 624 389,376 242,970,624 24.990 8.54075 0.0016103 623 626 391,876 245,314,376 25.000 8.54075 0.001600 625 626 391,876 245,314,376 25.000 8.54075 0.001600 625 626 391,876 245,314,376 25.000 8.54075 0.001600 625 626 391,876 245,314,376 25.000 8.54075 0.001600 625 626 391,876 245,314,376 25.000 8.54088 0.001600 625 626 391,876 245,314,376 25.000 8.54088 0.0015893 629 630 396,900 250,047,000 25.0998 8.57262 0.0015833 632 639,424 252,435,968 253,636,137 25.1599 8.58080 0.0015848 631 632 440,965 254,440,104 25.1794 8.59072 0.001573 634 635 403,225 256,047,875 25.2587 8.60375 0.0015973 634 640 409,600 262,144,000 25.2982 8.61774 0.0015873 634 640,496 257,239,445 25.2399 8.59075 0.0015873 634 640,496 257,239,445 25.2399 8.59075 0.0015873 636 640 440,600 263,440 252,288 25.3377 8.62671 0.0015876 641 641 440,881 266,9384,1777 25.3574 8.6318 0.0015575 644 644 441,736 266,9384,1777 25.3574 8.6318 0.0015575 644 647 448,609 270,840,03	603		219,256,227			0.0016584	603
605 366,025 221,445,125 24.5967 8.43769 0.0016329 605 606 367,236 222,545,016 24.6171 8.46235 0.0016302 606 607 368,449 223,648,543 24.6374 8.46700 0.0016447 608 369,664 224,755,712 24.6577 8.47659 0.0016447 608 369,664 224,755,712 24.6577 8.47659 0.0016447 608 609 370,881 225,8665,529 24.6779 8.47659 0.0016320 609 610 372,100 226,981,000 24.6982 8.48093 0.0016303 610 373,321 228,099,131 24.7184 8.48556 0.0016367 611 373,321 228,099,131 24.7184 8.48556 0.0016367 611 373,5769 230,346,397 24.7588 8.49481 0.0016340 612 374,544 229,220,928 24.7386 8.49018 0.0016340 612 613 375,769 230,346,397 24.7588 8.49481 0.0016340 612 615 378,225 232,608,375 24.7992 8.59404 0.0016287 614 376,996 231,475,544 24.7790 8.49942 0.0016287 614 615 378,225 232,608,375 24.7992 8.59404 0.0016260 615 616 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.0016103 618 618 381,924 236,029,032 24.8968 8.51784 0.0016103 618 618 381,924 236,029,032 24.8998 8.52702 0.0016125 619 620 384,400 238,328,000 24.8998 8.52702 0.0016125 619 620 384,400 238,328,000 24.8998 8.52702 0.0016103 621 622 386,884 240,641,848 24.9399 8.53160 0.0016077 622 386,884 240,641,848 24.9399 8.53618 0.0016007 622 624 389,376 244,140,625 25.0000 8.54975 0.0016031 621 623 396,525 244,140,625 25.0000 8.55899 0.0015949 627 626 391,876 245,314,376 25.0200 8.55899 0.0015949 627 626 391,876 245,314,376 25.0200 8.55899 0.0015949 627 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 395,641 248,858,189 25.0799 8.56888 0.0016000 625 624 624 399,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56888 0.0015909 637 633 400,569 255,636,137 25.1595 8.58620 0.0015939 637 633 400,569 255,636,137 25.1595 8.58620 0.0015939 637 638 401,956 254,840,104 25.1794 8.59072 0.0015773 634 645 401,956 254,840,104 25.1794 8.59072 0.0015773 634 645 401,956 254,840,104 25.1794 8.59072 0.0015738 649 640 409,600 262,144,							
606 367,236 222,545,016 24.6171 8.46235 0.0016302 606 607 368,449 223,648,543 24.6374 8.46700 0.0016474 608 608 369,664 224,755,712 24.6577 8.47165 0.0016474 608 609 370,881 225,866,529 24.6779 8.47629 0.0016420 609 610 373,100 226,981,000 24.6982 8.48093 0.0016393 610 611 373,321 228,999,131 24.7184 8.48556 0.0016367 611 373,321 228,999,131 24.7386 8.49018 0.0016313 613 375,769 230,346,397 24.7388 8.49481 0.0016313 613 375,769 230,346,397 24.7790 8.49942 0.0016286 615 378,425 232,608,375 24.7992 8.50404 0.0016260 615 616 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.5124 0.0016234 616 617 380,689 234,885,113 24.8395 8.5124 0.0016286 615 618 381,924 236,029,032 24.8596 8.51784 0.0016181 618 618 619 383,161 237,176,659 24.8998 8.52702 0.0016181 618 618 620 384,400 238,328,000 24.8998 8.52702 0.0016129 620 384,400 238,328,000 24.8998 8.53160 0.001613 621 622 386,884 240,641,848 24.9399 8.53160 0.001613 621 622 386,884 240,641,848 24.9399 8.53618 0.0016077 622 624 389,376 244,970,624 24.9800 8.54532 0.0016026 624 389,376 244,970,624 24.9800 8.54532 0.0016026 624 389,376 244,176,625 25.0000 8.554541 0.0015974 626 627 393,129 246,491,883 25.0000 8.554532 0.0016000 625 626 391,876 245,314,376 25.0000 8.554541 0.0015974 626 627 393,129 246,491,883 25.0000 8.554541 0.0015974 628 629 395,641 248,858,189 25.0799 8.56354 0.0015904 627 629 395,641 248,858,189 25.0799 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56354 0.0015924 628 633 490,602 255,047,875 25.1992 8.59524 0.001578 633 634 401,956 254,840,104 25.1794 8.59072 0.0015783 634 640,496 257,259,456 25.2982 8.60425 0.0015606 641 410,881 257,259,456 25.3999 8.56354 0.0015592 643 644 417,366 625,836,125 25.3999 8.60425 0.0015606 641 410,881 257,259,456 25.2982 8.60425 0.0015606 641 410,881 265,334,7471 25.3180 8.60425 0.0015592 644 414,736 625,847,707 25.3574 8.6318 0.0015552 643 644 417,316 269,586,136 25.4558 8.65350 0.0015488 644 645 417,316 269,586,136 25.4558 8.65350 0.0015488 644 645 417,316 269,586,136 25.4558 8.6	1 ' 1						
607 368,449 223,648,543 24.6374 8.46700 0.0016474 607 608 369,664 224,755,712 24.6577 8.47165 0.0016447 608 609 370,881 225,866,529 24.6779 8.47629 0.0016393 610 372,100 226,981,000 24.6982 8.48093 0.0016393 610 611 373,321 228,099,131 24.7184 8.48556 0.0016367 611 373,321 228,099,131 24.7184 8.48556 0.0016367 611 612 374,544 229,220,928 24.7386 8.49018 0.0016313 613 375,769 230,346,397 24.7588 8.49918 0.0016313 613 613 375,769 231,475,544 24.7790 8.49912 0.0016287 614 615 378,225 232,608,375 24.7992 8.50404 0.0016260 615 616 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 618 381,924 250,029,032 24.8596 8.51784 0.0016181 618 618 381,924 2350,029,032 24.8998 8.52702 0.0016185 619 383,161 237,176,659 24.8797 8.52243 0.0016129 620 621 385,641 239,483,061 24.9199 8.53160 0.0016103 611 622 386,884 240,641,848 24.9399 8.53618 0.0016076 622 386,884 240,641,848 24.9399 8.53618 0.0016076 623 623 388,129 241,804,367 24.9309 8.53618 0.0016076 623 626 391,876 244,970,624 24.9800 8.54075 0.0016051 623 628 394,384 247,673,152 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 626 627 395,144 6000 8.55899 0.0015999 627 628 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 628 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 628 629 395,641 248,858,189 25.0000 8.55899 0.0015999 627 628 628 629 395,641 248,8588 25.0000 8.55899 0.0015999 627 628 628 629 395,641 248,8588 25.1399 8.5975 0.0015723 638 638 407,044 259,696,888 25.3377 8.56640 0.0015525							
608 369,664 224,755,712 24.6577 8.47165 0.016447 608 609 370,881 225,866,529 24.6779 8.47165 0.016420 609 610 372,100 226,981,000 24.6982 8.48093 0.0016367 611 611 373,321 228,099,131 24.7184 8.48556 0.0016340 612 613 375,769 230,346,397 24.7588 8.49481 0.0016340 612 614 376,996 231,475,544 24.7790 8.49912 0.0016267 614 615 378,225 232,6083,375 24.7992 8.50404 0.0016260 615 616 379,456 231,744,896 24.8193 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.0016181 618 619 383,161 237,176,659 24.8998 8.52702 0.0016181 618 620 386,541 239,483,061 24,9199 8.53							
609 370,881 225,866,529 24.6779 8.47629 0.0016420 609 610 372,100 226,981,000 24.6982 8.48093 0.0016393 610 611 373,321 228,099,131 24.7184 8.48556 0.0016367 611 374,544 229,220,928 24.7386 8.49018 0.0016340 612 374,544 229,220,928 24.7386 8.49018 0.0016340 612 613 375,769 230,346,397 24.7588 8.49018 0.0016343 613 613 375,769 230,346,397 24.7588 8.49018 0.0016287 614 615 378,225 232,608,375 24.7992 8.50404 0.0016267 615 616 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 616 618 381,924 236,029,032 24.8596 8.51784 0.0016120 618 381,924 236,029,032 24.8596 8.51784 0.0016125 619 620 384,400 238,328,000 24.8998 8.52702 0.0016129 620 384,400 238,328,000 24.8998 8.52702 0.0016129 620 385,641 239,483,061 24.9199 8.53160 0.0016103 621 385,641 249,644,848 24.9399 8.5360 0.0016077 622 386,884 240,644,848 24.9399 8.5360 0.0016077 622 380,882 244,640,625 25.000 8.54075 0.0016026 624 389,376 242,970,624 24.9800 8.54075 0.0016026 624 389,376 224,970,624 24.9800 8.54075 0.0016026 624 389,384 247,673,152 25.0000 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015988 629 630 396,900 250,047,000 25.0998 8.57262 0.0015783 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.5975 0.0015743 633 634 401,956 254,840,104 25.1794 8.59072 0.0015743 633 634 401,956 254,840,104 25.1794 8.59072 0.0015743 633 634 401,956 254,840,104 25.1794 8.59072 0.0015743 633 634 401,956 254,840,104 25.1794 8.59072 0.0015743 633 634 401,956 254,840,104 25.1794 8.59072 0.0015743 633 639 408,321 260,917,119 25.2784 8.63125 0.0015949 639 639 408,321 260,917,119 25.2784 8.63125 0.0015946 633 405,600 262,144,000 25.2982 8.64774 0.0015576 642 644 412,164 264,609,288 25.3377 8.63670 0.0015576 642 644 412,164 264,609,288 25.3377 8.63649 0.0015							
610 372,100 226,981,000 24,6982 8.4803 0.0016393 610 611 373,331 228,009,131 24.7184 8.48556 0.0016367 611 612 374,544 229,220,928 24.7386 8.49018 0.0016340 612 613 375,769 230,346,397 24.7588 8.49481 0.0016343 613 614 376,996 231,475,544 24.7790 8.49942 0.0016287 614 615 378,225 232,608,375 24.7992 8.50404 0.0016260 616 616 379,456 233,744,896 24.8193 8.50864 0.0016204 616 617 380,689 234,885,113 24.8393 8.51324 0.0016207 617 618 381,924 236,029,032 24.8396 8.51784 0.0016181 618 619 383,161 237,176,659 24.8797 8.52243 0.0016129 620 621 384,400 238,328,000 24.8998 8.52702 0.0016129 620 621 385,641 239,483,061 24.9199 8.53160 0.0016103 621 622 386,884 240,641,848 24.9399 8.53160 0.0016076 612 623 388,129 241,804,367 24.9600 8.54075 0.0016026 624 625 390,625 244,140,625 25.0000 8.54958 0.0016000 625 626 391,876 245,314,376 25.0200 8.54988 0.0016000 625 627 393,129 246,491,883 25.0400 8.55899 0.0015994 626 628 394,384 247,673,152 25.0599 8.56354 0.0015974 626 629 395,641 248,858,189 25.0799 8.56808 0.0015994 628 630 396,900 250,047,000 25.0998 8.57262 0.001582 630 631 398,161 251,239,591 25.1197 8.57715 0.001582 633 633 400,689 253,6361,37 25.1296 8.59524 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015773 634 636 404,496 257,259,456 25.2190 8.59524 0.0015773 634 637 405,769 258,474,853 25.2289 8.59524 0.0015798 635 638 407,044 252,435,968 25.1396 8.59524 0.0015773 634 639 408,321 260,917,119 25.2784 8.61325 0.0015576 642 641 410,881 263,374,721 25.380 8.6222 0.0015609 637 642 412,164 264,609,288 25.3377 8.62671 0.0015556 644 643 413,449 625,847,707 25.3574 8.63118 0.0015556 644 644 419,660 270,840,023 25.4365 8.64459 0.0015554 645 647 418,609 270,840,023 25.4365 8.64459 0.0015554 645 649 421,201 273,339,449 25.4455 8.65795 0.0015488 649							
611 373,321 228,099,131 24.7184 8.48556 0.0016367 611 612 374,544 229,220,928 24.7386 8.49018 0.0016367 612 613 375,769 230,346,397 24.7588 8.49481 0.0016313 613 613 375,769 231,475,544 24.7790 8.49942 0.0016287 614 376,996 231,475,544 24.7790 8.49942 0.0016287 614 615 378,225 232,608,375 24.7992 8.50404 0.0016287 614 615 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.0016181 618 619 383,161 237,176,659 24.8797 8.52243 0.0016155 619 620 384,400 238,328,000 24.8988 8.52702 0.0016129 620 621 385,641 239,483,061 24.9199 8.53160 0.0016103 621 385,641 240,644,848 24.9399 8.5360 0.0016077 622 380,884 240,644,848 24.9399 8.5360 0.0016077 622 390,625 244,140,625 25.000 8.54075 0.0016026 623 390,625 244,140,625 25.000 8.54958 0.0016006 623 391,876 245,314,376 25.0200 8.55494 0.0015974 626 627 393,129 246,491,883 25.0400 8.55389 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.001594 626 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.001594 626 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015973 634 635 403,222 256,047,875 25.1595 8.5860 0.0015823 630 396,000 250,047,000 25.0998 8.57262 0.0015793 634 633 400,689 253,636,137 25.1595 8.5860 0.0015823 639 630 400,689 253,636,137 25.1595 8.5860 0.0015823 633 400,689 253,636,137 25.1595 8.58620 0.0015793 634 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,222 256,047,875 25.1595 8.58620 0.0015793 634 640,4966 257,259,456 25.2190 8.59075 0.0015723 634 641 410,881 265,847,707 25.3574 8.6318 0.0015552 649 649 409,600 262,144,000 25.2982 8.61774 0.0015625 640 640 410,881 265,847,707 25.3577 8.63010	1 -						- 1
612 374,544 229,220,928 24.7386 8.49018 0.∞16340 612 613 375,769 230,346,397 24.7588 8.49481 0.∞16313 613 613 614 376,996 231,475,544 24.7790 8.49942 0.∞16287 614 615 378,225 232,608,375 24.7992 8.50404 0.∞16287 614 615 378,225 232,608,375 24.7992 8.50404 0.∞1620 615 616 379,456 233,744,896 24.8193 8.50864 0.∞16234 616 617 380,689 234,885,113 24.8395 8.51324 0.∞16207 617 618 381,924 236,029,032 24.8596 8.51784 0.∞16181 618 618 383,161 237,176,659 24.8797 8.52243 0.∞16185 618 618 383,640 238,328,000 24.8998 8.52702 0.∞16129 620 384,400 238,328,000 24.8998 8.52702 0.∞16103 618 622 386,884 240,641,848 24.9399 8.53618 0.∞16077 622 386,884 240,641,848 24.9399 8.53618 0.∞16077 622 380,832 241,804,367 24.9600 8.54075 0.∞16036 623 389,376 242,970,624 24.9800 8.54532 0.∞16026 624 625 390,625 244,140,625 25.0000 8.55434 0.∞16000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55898 0.∞16000 627 627 393,129 246,491,883 25.0400 8.55898 0.∞1504 627 395,641 248,858,189 25.0799 8.56808 0.∞15949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 629 395,641 248,858,189 25.0799 8.56808 0.∞15949 627 629 395,641 248,858,189 25.0799 8.56808 0.∞15949 627 633 396,900 250,047,000 25.0998 8.57262 0.0015948 633 400,689 253,636,137 25.1290 8.59175 0.0015848 631 398,161 251,239,591 25.1197 8.57115 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 633 400,689 253,636,137 25.1595 8.58020 0.0015773 634 635 403,2225 256,047,875 25.2982 8.50375 0.0015773 634 645 403,672 25,8474,853 25.2389 8.60425 0.0015748 635 646 441,436 265,847,707 25.2587 8.60375 0.0015576 642 412,164 264,609,288 25.3377 8.62671 0.0015556 644 410,681 263,3374,721 25.3389 8.60425 0.001599 637 638 407,044 259,694,072 25.2587 8.60375 0.0015754 638 644 410,681 263,3374,721 25.3389 8.60425 0.0015509 637 649,5769 258,474,853 25.2389 8.60425 0.0015509 637 649,5769 258,474,873 25.2389 8.60425 0.0015509 644 410,681 263,3374,721 25.3389 8.6404 0.0015552 644 410,681 263,3374,721 25.3574 8.63118 0.0015552 643 649 440,96							
613 375,769 230,346,397 24.7588 8.49481 0.0016373 613 614 376,996 231,475,544 24.7790 8.49942 0.0016260 615 615 378,225 232,608,375 24.7992 8.50404 0.0016260 615 616 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.0016185 619 383,161 237,176,659 24.8797 8.52243 0.0016155 619 620 384,400 238,328,000 24.8998 8.52702 0.0016103 621 622 386,884 240,641,848 24.9399 8.53160 0.001603 621 622 386,884 240,641,848 24.9399 8.53618 0.0016077 622 389,376 242,970,624 24.9600 8.54075 0.0016051 623 390,625 244,140,625 25.0000 8.54532 0.0016000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.554534 0.0015974 626 627 393,129 246,491,883 25.0400 8.554534 0.0015974 626 629 395,641 248,858,189 25.0799 8.56808 0.0015994 627 626 629 395,641 248,858,189 25.0799 8.56808 0.0015994 627 626 639 396,900 250,047,000 25.0998 8.57262 0.0015924 628 639 396,404 252,435,968 25.1997 8.57600 0.0015988 639 630 396,900 250,047,000 25.0998 8.57262 0.0015924 628 633 400,689 253,636,137 25.1595 8.58620 0.0015928 633 634 401,956 254,840,104 25.1794 8.59072 0.0015974 636 637 405,769 258,474,853 25.2899 8.59354 0.0015928 633 400,689 253,636,137 25.1595 8.58620 0.0015998 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59975 0.0015978 633 634 401,956 254,840,104 25.1794 8.59072 0.0015798 633 634 407,044 259,694,072 25.2587 8.60375 0.0015978 634 635 403,225 256,047,875 25.1990 8.59975 0.0015974 626 634 447,316 269,586,136 25.2390 8.50375 0.0015925 640 641 410,881 263,374,721 25.3180 8.6222 0.0015601 641 642 412,164 264,609,288 25.3377 8.62671 0.0015504 645 644 417,316 269,586,136 25.4165 8.64459 0.0015526 643 647 418,609 270,840,023 25.4362 8.54550 0.0015504 645 644 419,602 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.64459 0.0015408 649 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
614 376,996 231,475,544 24.7790 8.49942 0.0016287 614 615 378,225 232,608,375 24.7992 8.50404 0.0016260 615 616 379,436 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.0016207 617 618 381,924 236,029,032 24.8797 8.52243 0.0016155 619 620 384,400 238,328,000 24.8998 8.52702 0.0016125 620 621 385,641 239,483,061 24.9199 8.53160 0.001603 621 622 386,884 240,641,848 24.9399 8.53160 0.0016077 622 623 388,129 241,804,367 24.9600 8.54075 0.0016051 623 624 389,376 242,970,624 24.9800 8.54532 0.0016051 623 625 390,625 244,140,625 25.000 8.54498 0.001600 624 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015974 626 629 395,641 248,858,189 25.0799 8.56808 0.0015949 627 630 396,900 250,047,000 25.0998 8.57126 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015873 630 633 400,689 253,636,137 25.1595 8.58620 0.001573 633 634 401,956 254,840,104 25.1794 8.59072 0.001573 633 637 405,769 258,474,853 25.238 8.6025 0.0015723 636 637 405,769 258,474,853 25.238 8.6025 0.0015723 636 639 408,321 260,917,119 25.2784 8.61325 0.001555 640 641 410,881 263,374,721 25.3180 8.6222 0.0015576 642 643 413,449 265,847,707 25.3574 8.63160 0.0015528 649 644 414,736 269,988 25.3377 8.63661 0.0015552 643 644 414,736 269,988 25.3377 8.63661 0.0015528 644 647 418,609 270,840,023 25.4455 8.65795 0.0015408 649 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
615 378,225 232,608,375 24.7992 8.59404 0.0016260 615 616 379,456 233,744,896 24.8193 8.50864 0.0016234 616 617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.0016181 618 619 383,161 237,176,659 24.8797 8.52243 0.0016185 619 620 384,400 238,328,000 24.8998 8.52702 0.0016125 621 622 386,884 240,641,848 24.9399 8.53160 0.001603 621 622 386,884 240,641,848 24.9399 8.53160 0.0016077 622 623 388,129 241,804,367 24.9600 8.54075 0.0016077 622 623 389,376 242,970,624 24.9800 8.54532 0.0016026 624 389,376 242,970,624 24.9800 8.54532 0.0016026 624 625 390,625 244,140,625 25.0000 8.54988 0.0016000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015924 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015924 628 629 395,641 251,239,591 25.1197 8.57715 0.0015848 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015924 633 634 400,956 254,840,104 25.1794 8.59072 0.0015773 633 634 401,956 254,840,104 25.1794 8.59072 0.0015723 636 637 405,769 258,474,853 25.2389 8.60225 0.0015723 636 637 405,769 258,474,853 25.2389 8.60225 0.0015723 636 637 405,769 258,474,853 25.2389 8.60225 0.0015723 636 637 405,769 258,474,853 25.2389 8.60225 0.0015723 636 637 405,769 258,474,853 25.2389 8.60225 0.0015723 636 637 405,769 258,474,853 25.2389 8.60225 0.0015723 636 637 405,769 258,474,853 25.2389 8.60225 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3574 8.63180 0.0015525 640 644 411,736 269,586,136 25.4165 8.64490 0.0015456 647 418,609 270,840,023 25.4362 8.64904	1						
616 617 618 619 618 381,924 236,029,032 24,8396 8.51784 0.0016181 618 619 383,161 237,176,659 24,8797 8.52243 0.0016155 619 620 384,400 238,328,000 24,8998 8.52702 0.0016129 620 621 385,641 239,483,061 24,9199 8.53160 0.0016129 620 621 386,884 240,641,848 24,9399 8.53160 0.001603 621 622 386,884 240,641,848 24,9399 8.53160 0.001607 622 623 388,129 241,804,367 24,9600 8.54975 0.0016026 624 389,376 242,970,624 24,9600 8.54975 0.0016026 624 389,376 242,970,624 24,9800 8.54932 0.0016026 624 625 390,625 244,140,625 25.0000 8.54988 0.0016000 625 626 391,876 245,314,376 25.0200 8.55494 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015974 628 639 395,641 248,838,189 25.0799 8.56808 0.0015898 629 395,641 248,838,189 25.0799 8.56808 0.0015823 630 396,900 250,047,000 25.0998 8.57262 0.0015823 632 399,424 252,435,968 25.1197 8.57715 0.0015848 631 399,424 252,435,968 25.1197 8.57715 0.0015848 631 399,424 252,435,968 25.1197 8.597715 0.0015848 631 404,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 251,794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1595 8.59620 0.0015798 633 634 401,956 254,840,104 251,794 8.59072 0.0015773 634 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60575 0.0015699 637 638 407,044 259,694,072 25.2587 8.60575 0.0015696 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3380 8.62222 0.0015601 641 410,881 263,374,721 25.3380 8.62222 0.0015601 641 410,881 263,374,721 25.3380 8.62220 0.0015504 643 413,449 265,847,707 25.3574 8.6318 0.0015234 649 266,847,707 25.3574 8.6318 0.0015234 649 272,097,792 25.4558 8.655795 0.0015408 649							
617 380,689 234,885,113 24.8395 8.51324 0.0016207 617 618 381,924 236,029,032 24.8596 8.51784 0.0016181 618 619 383,161 237,176,659 24.8797 8.52243 0.0016155 619 620 384,400 238,328,000 24.8998 8.52702 0.0016129 620 621 385,641 239,483,061 24.9199 8.53160 0.0016077 622 623 386,884 240,641,848 24.9399 8.53618 0.0016077 622 623 388,129 241,804,367 24.9600 8.54075 0.0016051 623 624 389,376 242,970,624 24.9800 8.54075 0.0016056 624 625 390,625 244,140,625 25.0000 8.54988 0.0016000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56384 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015898 629 630 396,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 399,424 252,435,968 25.1396 8.58620 0.0015773 634 635 403,225 256,047,875 25.1992 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59075 0.0015723 636 637 405,769 258,474,853 25.2389 8.6025 0.0015723 636 637 405,769 258,474,853 25.2389 8.6025 0.0015723 636 637 405,769 258,474,853 25.2389 8.6025 0.0015723 636 637 405,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 644 414,736 269,686,636 25.4165 8.6459 0.0015504 645 647							
618 381,924 236,029,032 24.8596 8.51784 0.0016181 618 619 383,161 237,176,659 24.8797 8.52243 0.0016155 619 620 384,400 238,328,000 24.8998 8.52702 0.0016129 620 621 385,641 239,483,061 24.9199 8.53160 0.0016077 622 623 386,884 240,641,848 24.9399 8.53618 0.0016077 622 623 388,129 241,804,367 24.9600 8.54075 0.0016051 623 624 389,376 242,970,624 24.9800 8.54532 0.0016026 624 625 390,625 244,140,625 25.000 8.54988 0.001600 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.001588 629 630 336,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1593 8.58620 0.0015736 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015723 636 637 405,769 258,474,853 25.2389 8.6025 0.0015723 636 637 405,769 258,474,853 25.2389 8.6025 0.0015723 636 639 406,821 250,917,119 25.2784 8.61325 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015674 635 643 413,449 265,847,707 25.3574 8.6318 0.0015526 640 641 410,881 263,374,721 25.3180 8.6222 0.0015674 639 644 412,164 264,609,288 25.3377 8.63661 0.0015526 640 643 413,449 265,847,707 25.3574 8.6318 0.0015525 643 644 414,736 265,089,984 25.3377 8.63661 0.0015526 644 645 412,164 264,609,288 25.3377 8.63661 0.0015526 644 647 418,609 270,840,023 25.4362 8.64904 0.0015526 644 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649					1		
619 383,161 237,176,659 24.8797 8.52243 0.0016155 619 620 384,400 238,328,000 24.8998 8.52702 0.0016129 620 621 385,641 239,483,061 24.9199 8.53160 0.0016103 621 622 386,884 240,641,848 24.9399 8.53618 0.0016077 622 623 388,129 241,804,367 24.9600 8.54075 0.0016051 623 624 389,376 242,970,624 24.9800 8.54532 0.0016026 624 625 390,625 244,140,625 25.0000 8.54988 0.0016000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015924 628 630 396,900 250,047,000 25.0998 8.57262 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 633 635 403,225 256,047,875 25.1992 8.59524 0.0015743 635 636 404,496 257,259,456 25.2190 8.5975 0.0015743 635 637 405,769 258,474,853 25.2389 8.60425 0.0015743 635 639 408,321 260,917,119 25.2784 8.61325 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 642 412,164 264,669,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.001552 643 644 414,736 269,586,136 25.4165 8.64459 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015526 643 647 418,609 270,840,023 25.4362 8.64590 0.0015408 649 649 421,201 273,359,449 25.4755 8.65595 0.0015408 649							
620 384,400 238,328,000 24,8998 8.52702 0.0016129 620 621 385,641 239,483,061 24,9199 8.53360 0.0016077 622 623 386,884 240,641,848 24,9399 8.53618 0.0016077 622 623 388,129 241,804,367 24,9600 8.54075 0.0016026 624 389,376 242,970,624 24,9800 8.54532 0.0016026 624 625 390,625 244,140,625 25.0000 8.54532 0.0016026 625 626 391,876 245,314,376 25.0200 8.55498 0.00150974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,838,189 25.0799 8.56808 0.0015988 629 630 396,900 250,047,000 25.0998 8.57262 0.0015848 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 399,424 252,435,968 25.1396 8.58168 0.0015823 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 403,225 256,047,875 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.2190 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015694 638 649 440,600 262,144,000 25.2982 8.6174 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 644 414,736 269,586,136 25.4165 8.64459 0.0015526 643 413,449 265,847,707 25.3574 8.63180 0.0015526 643 413,449 265,847,707 25.3574 8.63180 0.0015526 643 413,449 265,847,707 25.3574 8.63180 0.0015526 644 647,316 269,586,136 25.4165 8.64459 0.0015456 647 418,609 270,840,023 25.4362 8.64904 0.0015456 647 418,609 270,840,023 25.4362 8.64904 0.0015456 647							
621 385,641 239,483,061 24.9199 8.53160 0.0016103 621 622 386,884 240,641,848 24.9399 8.53618 0.0016077 622 623 388,129 241,804,367 24.9600 8.54075 0.0016051 623 624 389,376 242,970,624 24.9800 8.54532 0.0016026 624 625 390,625 244,140,625 25.0000 8.54988 0.0016000 625 626 391,876 245,314,376 25.0200 8.55899 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015949 627 628 395,641 248,838,189 25.0799 8.56808 0.0015898 629 630 396,900 25,047,000 25.0998 8.57262 0.0015898 629 630 396,404 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015738 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59975 0.0015748 635 636 404,496 257,259,456 25.2190 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015974 638 639 408,321 260,917,119 25.2784 8.61325 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8.61774 0.0015625 640 401,600 262,144,000 25.2982 8							
622 386,884 240,641,848 24.9399 8.53618 0.0016077 622 623 388,129 241,804,367 24.9600 8.54075 0.0016051 623 624 389,376 242,970,624 24.9800 8.54532 0.0016026 624 625 390,625 244,140,625 25.0000 8.54988 0.0016000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015878 629 630 396,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015723 636 639 406,832 1260,917,119 25.2784 8.61325 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015674 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015604 639 644 412,164 264,609,288 25.3377 8.63261 0.0015528 644 645 412,164 264,609,288 25.3377 8.63261 0.0015528 644 647 418,609 270,840,023 25.4362 8.64904 0.0015528 644 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649	1						· .
623 388,129 241,804,367 24.9600 8.54975 0.0016051 623 624 389,376 242,970,624 24.9800 8.54532 0.0016026 624 625 390,625 244,140,625 25.0000 8.5444 0.0015000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015898 629 630 396,900 250,047,000 25.0998 8.57262 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,6361,37 25.1595 8.58620 0.0015823 632 633 400,689 253,6361,37 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015723 636 639 408,321 260,917,119 25.2784 8.61325 0.0015674 638 639 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015576 642 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.001552 643 644 414,7316 269,9884 25.3377 8.63679 0.0015572 644 647,316 269,586,136 25.4165 8.64459 0.0015528 644 647,316 269,586,136 25.4165 8.64459 0.0015528 644 647,316 269,586,136 25.4165 8.64459 0.0015528 644 647,316 269,586,136 25.4165 8.64459 0.0015528 644 647,316 269,586,136 25.4165 8.64459 0.0015486 645 647 418,609 270,840,023 25.4362 8.65795 0.0015408 649 649 421,201 273,359,449 25.4755 8.65595 0.0015408 649							
624 389,376 242,970,624 24.98∞ 8.54532 0.∞16026 624 625 390,625 244,140,625 25.∞∞ 8.54988 0.∞16∞ 625 626 391,876 245,314,376 25.02∞ 8.54988 0.∞15974 626 627 393,129 246,491,883 25.04∞ 8.55344 0.∞15974 626 626 394,384 247,673,152 25.0599 8.56354 0.∞15949 627 628 394,384 247,673,152 25.0599 8.56354 0.∞15949 627 628 394,384 247,673,152 25.0599 8.56354 0.∞15898 629 630 396,9∞ 250,047,0∞ 25.0998 8.57262 0.∞15898 629 630 396,9∞ 250,047,0∞ 25.0998 8.57262 0.∞15873 630 631 398,161 251,239,591 25.1197 8.57715 0.∞15848 631 632 399,424 252,435,968 25.1396 8.58168 0.∞15823 632 633 400,689 253,636,137 25.1595 8.58620 0.∞15798 633 634 401,956 254,840,104 25.1794 8.59072 0.∞15773 634 635 403,225 256,047,875 25.1992 8.59524 0.∞15748 635 636 404,496 257,259,456 25.2190 8.59975 0.∞15723 636 637 405,769 258,474,853 25.2389 8.60425 0.∞15699 637 638 407,044 259,694,072 25.2587 8.60875 0.∞15674 638 639 408,321 260,917,119 25.2784 8.61325 0.∞15694 639 640 409,6∞ 262,144,0∞ 25.2982 8.6174 0.∞15652 640 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 410,881 269,586,136 25.3377 8.62671 0.∞15575 643 413,449 265,847,707 25.3574 8.63118 0.∞15552 643 644 414,736 269,586,136 25.4165 8.64459 0.∞15528 644 647,316 269,586,136 25.4165 8.64459 0.∞15528 644 647,316 269,586,136 25.4165 8.64459 0.∞15548 646 647 418,609 270,840,023 25.4362 8.64904 0.∞15456 647 418,609 270,840,023 25.4365 8.65795 0.∞15408 649 421,201 273,359,449 25.4755 8.65795 0.∞15408 649							
625 390,625 244,140,625 25.000 8.54988 0.0016000 625 626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015898 629 639 395,641 248,888,189 25.0799 8.56880 0.0015898 629 630 396,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015748 635 635 403,225 256,047,875 25.1992 8.59524 0.0015748 635 636 404,496 257,259,456 25.2190 8.59975 0.0015748 635 637 405,769 258,474,853 25.2389 8.60425 0.0015625 637 638 407,044 259,694,072 25.2587 8.60375 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015694 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015695 642 643 413,449 265,847,707 25.3574 8.63118 0.0015526 643 644,4136 267,089,984 25.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015526 644 647,316 269,586,136 25.4165 8.64459 0.0015548 646 647 418,609 270,840,023 25.4362 8.65795 0.0015408 649 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
626 391,876 245,314,376 25.0200 8.55444 0.0015974 626 627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015898 629 630 396,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015773 634 635 403,225 256,447,853 25.2389 8.60425 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015674 638 639 408,321 260,917,119 25.2784 8.61325 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015696 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015604 639 644 412,164 264,609,288 25.3377 8.62671 0.0015576 642 412,164 264,609,288 25.3377 8.63661 0.0015525 643 415,449 265,847,707 25.3574 8.63118 0.0015525 643 644 414,736 267,089,984 25.3772 8.63560 0.0015528 644 647 418,609 270,840,023 25.4362 8.64904 0.0015545 647 648 419,904 272,097,792 25.4358 8.65795 0.0015408 649 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649					0.00		
627 393,129 246,491,883 25.0400 8.55899 0.0015949 627 628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56888 0.0015898 629 630 396,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015773 635 636 404,496 257,259,456 25.2190 8.59575 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015674 638 639 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015601 641 642 412,164 264,609,288 25.3377 8.636671 0.0015572 643 413,449 265,847,707 25.3574 8.6310 0.0015526 644 641,316 269,586,136 25.3169 8.64012 0.0015528 644 641 414,736 267,089,984 25.3772 8.63566 0.0015528 644 641 414,736 267,089,984 25.3772 8.63566 0.0015528 644 641,316 269,586,136 25.4165 8.64459 0.0015548 645 647 418,609 270,840,023 25.4362 8.65795 0.0015408 649 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							- 1
628 394,384 247,673,152 25.0599 8.56354 0.0015924 628 629 395,641 248,858,189 25.0799 8.56808 0.0015898 629 630 396,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015748 635 636 404,496 257,259,456 25.2190 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015694 638 639 408,321 260,917,119 25.2784 8.61325 0.0015649 639 640 409,600 262,144,000 25.2982 8.6174 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 642 412,164 264,669,288 25.3377 8.62671 0.0015575 642 643 413,449 265,847,707 25.3574 8.63118 0.0015552 643 644 414,736 267,089,884 25.3772 8.63566 0.0015528 644 647, 416,025 268,336,125 25.3969 8.64012 0.0015526 644 647,316 269,586,136 25.4165 8.64459 0.0015528 644 647, 418,609 270,840,023 25.4362 8.64904 0.0015456 647 648 419,904 272,097,792 25.4558 8.65795 0.0015408 649 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649	1 1						
629 395,641 248,858,189 25.0799 8.56808 0.0015898 629 630 396,900 250,047,000 25.0998 8.57262 0.015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 633 400,689 253,656,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015748 635 636 404,496 257,259,456 25.2199 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015691 641 642 412,164 264,609,288 25.3377 8.6376 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.0015525 643 644 414,736 267,089,984 25.3772 8.63560 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.64024 0.0015408 646 647 418,609 270,840,023 25.4362 8.64590 0.0015408 649 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649	1 :						
630 396,900 250,047,000 25.0998 8.57262 0.0015873 630 631 398,161 251,239,591 25.1197 8.57715 0.0015848 631 632 399,424 252,435,968 25.1396 8.58168 0.0015823 632 632 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015748 635 636 404,496 257,259,456 25.2199 8.59524 0.0015748 635 636 404,496 257,259,456 25.2190 8.59975 0.0015748 635 637 405,769 258,474,853 25.2389 8.60425 0.0015674 638 407,044 259,694,072 25.2587 8.60375 0.0015674 638 639 408,321 260,917,119 25.2784 8.61325 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015601 641 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 412,164 264,609,288 25.3377 8.63671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.0015552 643 644 414,736 267,089,984 25.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 647 418,609 270,840,023 25.4362 8.64590 0.0015408 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
631 398,161 251,239,591 25.1197 8.57715 0.∞15848 631 632 399,424 252,435,968 25.1396 8.58168 0.∞15823 632 633 4∞,689 253,636,137 25.1595 8.58620 0.∞15798 633 634 401,956 254,840,104 25.1794 8.59072 0.∞15773 634 635 403,225 256,047,875 25.1992 8.59524 0.∞15773 634 636 404,496 257,259,456 25.2190 8.59975 0.∞15723 636 637 405,769 258,474,853 25.2389 8.60425 0.∞15699 637 638 407,044 259,694,072 25.2587 8.60875 0.∞15694 638 639 408,321 260,917,119 25.2784 8.61225 0.∞15649 639 640 409,6∞ 262,144,0∞ 25.2982 8.61774 0.∞15625 640 641 410,881 263,374,721 25.3180 8.62222							
632 399,424 252,435,968 25.1396 8.58168 0.005823 632 633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59975 0.0015748 635 636 404,496 257,259,456 25.2190 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2784 8.6125 0.0015699 637 639 408,321 260,917,119 25.2784 8.61225 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 642 412,164 264,609,288 25.3377 8.636							
633 400,689 253,636,137 25.1595 8.58620 0.0015798 633 634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015748 635 636 404,496 257,259,456 25.2190 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015649 638 639 408,321 260,917,119 25.2784 8.61325 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015649 639 642 412,164 264,609,288 25.3377 8.63118 0.0015576 642 643 414,736 265,847,707 25.3574 8.6							
634 401,956 254,840,104 25.1794 8.59072 0.0015773 634 635 403,225 256,047,875 25.1992 8.59524 0.0015748 635 636 404,496 257,259,456 25.2199 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60375 0.0015649 638 639 408,321 260,917,119 25.2784 8.61325 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63366 0.0015552 643 644 414,736 267,089,984 25.3772 8.6							
635 403,225 256,047,875 25.1992 8.59524 0.0015748 635 636 404,496 257,259,456 25.2190 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60375 0.0015674 638 639 408,321 260,917,119 25.2784 8.61325 0.0015695 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.6222 0.0015601 641 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.0015552 643 644 414,736 267,089,984 25.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 647 418,609 270,840,023 25.4362 8.64459 0.0015408 646 647 418,609 270,840,023 25.4362 8.64579 0.0015408 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
636 404,496 257,259,456 25.2190 8.59975 0.0015723 636 637 405,769 258,474,853 25.2389 8.60425 0.0015699 637 638 407,044 259,694,072 25.2587 8.60875 0.0015674 638 639 408,321 260,917,119 25.2784 8.61225 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.6318 0.0015552 643 644 414,736 267,089,984 25.3772 8.63566 0.001552 643 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.644							
637 405,769 258,474,853 25.2389 8.60425 0.∞15699 637 638 407,044 259,694,072 25.2587 8.60875 0.∞15674 638 639 408,321 260,917,119 25.2784 8.61325 0.∞15649 639 640 409,6∞ 262,144,∞ 25.2982 8.61774 0.∞15625 640 641 410,881 263,374,721 25.3180 8.62222 0.∞15601 641 642 412,164 264,609,288 25.3377 8.62671 0.∞15576 642 412,164 264,609,288 25.3377 8.62671 0.∞15576 642 643 413,449 265,847,707 25.3574 8.63118 0.∞15552 643 644 414,736 267,∞89,984 25.3772 8.63566 0.∞15552 644 645 416,025 268,336,125 25.3969 8.64012 0.∞15504 645 646 417,316 269,586,136 25.4165 8.64459 0.∞15480 645 647 418,609 270,840,023 25.4362 8.64904 0.∞15456 647 648 419,904 272,097,792 25.4558 8.65350 0.∞15408 649 649 421,201 273,359,449 25.4755 8.65795 0.∞15408 649	1			1			
638 407,044 259,694,072 25.2587 8.60875 0.0015674 638 639 408,321 260,917,119 25.2784 8.61325 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.6318 0.0015552 643 644 414,736 267,089,984 25.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.64459 0.0015408 646 647 418,609 270,840,023 25.4558 8.65350 0.0015456 647 648 419,904 272,097,792 25.4558 8.65						*	
639 408,321 260,917,119 25.2784 8.61325 0.0015649 639 640 409,600 262,144,000 25.2982 8.61774 0.0015625 640 641 410,881 263,374,721 25.3180 8.62222 0.0015625 642 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.0015552 643 644 414,736 267,089,984 25.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.64459 0.0015480 646 647 418,609 270,840,023 25.4362 8.64904 0.0015456 647 648 419,904 272,097,792 25.4555 8.65350 0.0015408 649 649 421,201 273,359,449 25.4755 8.6							
$\begin{array}{cccccccccccccccccccccccccccccccccccc$							
641 410,881 263,374,721 25.3180 8.62222 0.0015601 641 642 412,164 264,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.0015552 643 644 414,736 267,089,984 25.3772 8.63560 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015528 644 646 417,316 269,586,136 25.4165 8.6459 0.0015480 646 647 418,609 270,840,023 25.4362 8.64904 0.0015480 647 648 419,904 272,097,792 25.4558 8.65350 0.0015408 648 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
642 412,164 261,609,288 25.3377 8.62671 0.0015576 642 643 413,449 265,847,707 25.3574 8.63118 0.0015552 643 644 414,736 267,089,984 25.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015548 645 646 417,316 269,586,136 25.4165 8.64459 0.001548 646 647 418,609 270,840,023 25.4362 8.64904 0.0015486 647 648 419,904 272,097,792 25.4558 8.65350 0.0015408 648 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649				1			
643 413,449 265,847,707 25.3574 8.63118 0.0015552 643 644 414,736 267,089,984 25.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.64459 0.0015480 646 647 418,609 270,840,023 25.4362 8.64904 0.0015456 647 648 419,904 272,097,792 25.4558 8.65350 0.0015408 648 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649			263,374,721	25.3180			
644 414,736 267,089,984 23.3772 8.63566 0.0015528 644 645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.64459 0.0015480 646 647 418,609 270,840,023 25.4362 8.64904 0.0015456 647 648 419,904 272,097,792 25.4558 8.65350 0.0015432 648 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
645 416,025 268,336,125 25.3969 8.64012 0.0015504 645 646 417,316 269,586,136 25.4165 8.64459 0.0015480 646 647 418,609 270,840,023 25.4362 8.64904 0.0015456 647 648 419,904 272,097,792 25.4558 8.65350 0.0015432 648 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649				25.3574			
646 417,316 269,586,136 25.4165 8.64459 0.015480 646 647 418,609 270,840,023 25.4362 8.64904 0.015456 647 648 419,904 272,097,792 25.4558 8.65350 0.015432 648 649 421,201 273,359,449 25.4755 8.65795 0.015408 649							
647 418,609 270,840,023 25.4362 8.64904 0.0015456 647 648 419,904 272,097,792 25.4558 8.65350 0.0015432 648 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649							
648 419,904 272,097,792 25.4558 8.65350 0.0015432 648 649 421,201 273,359,449 25.4755 8.65795 0.0015408 649)	
649 421,201 273,359,449 25.4755 8.65795 0.0015408 649		418,609	270,840,023	25.4362	8.64904	0.0015456	
10.0057115			272,097,792	25.4558			
650 422,500 274,625,000 25.4951 8.66239 0.0015385 650							
	650	422,500	274,625,000	25.4951	8.66239	0.0015385	650

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
651	423,801	275,894,451	25.5147	8.66683	0.0015361	651
652	425,104	277,167,808	25.5343	8.67127	0.0015337	652
653	426,409	278,445,077	25.5539	8.67570	0.0015314	653
654	427,716	279,726,264	25.5734	8.68012	0.0015291	654
655	429,025	281,011,375	25.5930	8.68455	0.0015267	655
656	430,336	282,300,416	25.6125	8.68896	0.0015244	656
657	431,649	283,593,393	25.6320	8.69338	0.0015221	657
658	432,964	284,890,312	25.6515	8.69778	0.0015198	658
659	434,281	286,191,179	25.6710	8.70219	0.0015175	659
660	435,600	287,496,000	25.6905	8.70659	0.0015152	660
661	436,921	288,804,781	25.7099	8.71098	0.0015129	661
662	438,244	290,117,528	25.7294	8.71537	0.0015106	662
663	439,569	291,434,247	25.7488	8.71976	0.0015083	663
664	440,896	292,754,944	25.7682	8.72414	0.0015060	664
665	442,225	294,079,625	25.7876	8.72852	0.0015038	665
666	443,556	295,408,296	25.8070	8.73289	0.0015015	666
667	444,889	296,740,963	25.8263	8.73726	0.0014993	667
668	446,224	298,077,632	25.8457	8.74162	0.0014970	668
669	447,561	299,418,309	25.8650	8.74598	0.0014948	669
670	448,900	300,763,000	25.8844	8.75034	0.0014925	670
671	450,241	302,111,711	25.9037	8.75469	0.0014903	671
672	451,584	303,464,448	25.9230	8.75904	0.0014881	672
673	452,929	304,821,217	25.9422	8.76338	0.0014859	673
674	454,276	306,182,024	25.9615	8.76772	0.0014837	674
675	455,625	307,546,875	25.9808	8.77205	0.0014815	675
676	456,976	308,915,776	26.0000	8.77638	0.0014793	676
677	458,329	310,288,733	26.0192	8.78071	0.0014771	677
678	459,684	311,665,752	26.0384	8.78503	0.0014749	678
679	461,041	313,046,839	26.0576	8.78935	0.0014728	679
680	462,400	314,432,000	26.0768	8.79366	0.0014706	680
681	463,761	315,821,241	26.0960	8.79797	0.0014684	681
682	465,124	317,214,568	26.1151	8.80227	0.0014663	682
683	466,489	318,611,987	26.1343	8.80657	0.0014641	683
684	467,856	320,013,504	26.1534	8.81087	0.0014620	684
685	469,225	321,419,125	26.1725	8.81516	0.0014599	685
686	470,596	322,828,856	26.1916	8.81945	0.0014577	686
687	470,390	324,242,703	26.2107	8.82373	0.0014556	687
688	471,909	325,660,672	26.2298	8.82801	0.0014535	688
689	473,344	327,082,769	26.2488	8.83229	0.0014514	689
690	476,100	328,509,000	26.2679	8.83656	0.0014493	690
691	477,481	329,939,371	26.2869	8.84082	0.0014472	691
692	477,461	331,373,888	26.3059	8.84509	0.0014451	692
693	480,249	332,812,557	26.3249	8.84934	0.0014430	693
694	481,636	334,255,384	26.3439	8.85360	0.0014409	694
1 -	483,025	335,702,375	26.3629	8.85785	0.0014388	695
695	484,416	335,702,375	26.3818	8.86210	0.0014368	696
	1	338,608,873	26.4008	8.86634	0.0014347	697
697	485,809	340,068,392	26.4197	8.87058	0.0014327	698
1	488,601	340,000,392	26.4197	8.87481	0.0014306	699
699	1 ' '	341,532,099	26.4575	8.87904	0.0014386	700
700	490,000	343,000,000	20.43/3	3.07904	3.0014200	,,,,

			1			
No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
701	491,401	344,472,101	26.4764	8.88327	0.0014265	701
702	492,804	345,948,408	26.4953	8.88749	0.0014245	702
703	494,209	347,428,927	26.5141	8.89171	0.0014225	703
704	495,616	348,913,664	26.5330	8.89592	0.0014205	704
705	497,025	350,402,625	26.5518	8.90013	0.0014184	705
706	498,436	351,895,816	26.5707	8.90434	0.0014164	706
707	499,849	353,393,243	26.5895	8.90854	0.0014144	707
708	501,264	354,894,912	26.6083	8.91274	0.0014124	708
709	502,681	356,400,829	26.6271	8.91693	0.0014104	709
710	504,100	357,911,000	26.6458	8.92112	0.0014085	710
711	505,521	359,425,431	26.6646	8.92531	0.0014065	711
712	506,944	360,944,128	26.6833	8.92949	0.0014045	712
713	508,369	362,467,097	26.7021	8.93367	0.0014025	713
714	509,796	363,994,344	26.7208	8.93784	0.0014006	714
715	511,225	365,525,875	26.7395	8.94201	0.0013986	715
716	512,656	367,061,696	26.7582	8.94618	0.0013966	716
717	514,089	368,601,813	26.7769	8.95034	0.0013947	717
718	515,524	370,146,232	26.7955	8.95450	0.0013928	718
719	516,961	371,694,959	26.8142	8.95866	0.0013908	719
720	518,400	373,248,000	26.8328	8.96281	0.0013889	720
721	519,841	374,805,361	26.8514	8.96696	0.0013870	721
722	521,284	376,367,048	26.8701	8.97110	0.0013850	722
723	522,729	377,933,067	26.8887	8.97524	0.0013831	723
724	524,176	379,503,424	26.9072	8.97938	0.0013812	724
725	525,625	381,078,125	26.9258	8.98351	0.0013793	725
726	527,076	382,657,176	26.9444	8.98764	0.0013774	726
727	528,529	384,240,583	26.9629	8.99176	0.0013755	727
728	529,984	385,828,352	26.9815	8.99589	0.0013736	728
729	531,441	387,420,489	27.0000	9.00000	0.0013717	729
730	532,900	389,017,∞∞	27.0185	9.00411	0.0013699	730
731	534,361	390,617,891	27.0370	9.00822	0.0013680	731
732	535,824	392,223,168	27.0555	9.01233	0.0013661	732
733	537,289	393 832,837	27.0740	9.01643	0.0013643	733
734	538,756	395,446,904	27.0924	9.02053	0.0013624	734
735	540,225	397,065,375	27.1109	9.02462	0.0013605	735
736	541,696	398,688,256	27.1293	9.02871	0.0013587	736
737	543,169	400,315,553	27.1477	9.03280	0.0013569	737
738	544,644	401,947,272	27.1662	9.03689	0.0013550	738
739	546,121	403,583,419	27.1846	9.04097	0.0013532	739
740	547,600	405,224,000	27.2029	9.04504	0.0013514	740
741	549,081	406,869,021	27.2213	9.04911	0.0013495	741
742	550,564	408,518,488	27.2397	9.05318	0.0013477	742
743	552,049	410,172,407	27.2580	9.05725	0.0013459	743
744	553,536	411,830,784	27.2764	9.05131	0.0013441	744
745	555,025	413,493,625	27.2947	9.06537	0.0013423	745
746	556,516	415,160,936	27.3130	9.06942	0.0013405	746
747	558,009	416,832,723	27.3313	9.07347	0.0013387	747
748	559,504	418,508,992	27.3496	9.07752	0.0013369	748
749	561,001	420,189,749	27.3679	9.08156	0.0013351	749
750	562,500	421,875,000	27.3861	9.08560	0.0013333	750

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
751	564,001	423,564,751	27.4044	9.08964	0.0013316	751
752	565,504	425,259,008	27.4226	9.09367	0.0013298	752
753	567,∞9	426,957,777	27.4408	9.09770	0.0013280	753
754	568,516	428,661,064	27.4591	9.10173	0.0013263	754
755	570,025	430,368,875	27.4773	9.10575	0.0013245	755
756	571,536	432,081,216	27.4955	9.10977	0.0013228	756
757	573,049	433,798,093	27.5136	9.11378	0.0013210	757
758	574,564	435,519,512	27.5318	9.11779	0.0013193	758
759	576,081	437,245,479	27.5500	9.12180	0.0013175	759
760	577,6∞	438,976,000	27.5681	9.12581	0.0013158	760
761	579,121	440,711,081	27.5862	9.12981	0.0013141	761
762	580,644	442,450,728	27.6043	9.13380	0.0013123	762
763	582,169	444,194,947	27.6225	9.13780	0.0013106	763
764	583,696	445,943,744	27.6405	9.14179	0.0013089	764
765	585,225	447,697,125	27.6586	9.14577	0.0013072	765
766	586,756	449,455,096	27.6767	9.14976	0.0013055	766
767	588,289	451,217,663	27.6948	9.15374	0.0013038	767
768	589,824	452,984,832	27.7128	9.15771	0.0013021	768
769	591,361	454,756,609	27.7308	9.16169	0.0013004	769
770	592,900	456,533,000	27.7489	9.16566	0.0012987	770
771	594,441	458,314,011	27.7669	9.16962	0.0012970	771
772	595,984	460,099,648	27.7849	9.17359	0.0012953	772
773	597,529	461,889,917	27.8029	9.17754	0.0012937	773
774	599,076	463,684,824	27.8209	9.18150	0.0012920	774
775	600,625	465,484,375	27.8388	9.18545	0.0012903	775
776	602,176	467,288,576	27.8568	9.18940	0.0012887	776
777	603,729	469,097,433	27.8747	9.19335	0.0012870	777
778	605,284	470,910,952	27.8927	9.19729	0.0012853	778
779	606,841	472,729,139	27.9106	9.20123	0.0012837	779
780	608,400	474,552,000	27.9285	9.20516	0.0012821	780
781	609,961	476,379,541	27.9464	9.20910	0.0012804	781
782	611,524	478,211,768	27.9643	9.21303	0.0012788	782
783	613,089	480,048,687	27.9821	9.21695	0.0012771	783
784	614,656	481,890,304	28.0000	9.22087	0.0012755	784
785	616,225	483,736,625	28.0179	9.22479	0.0012739	785
786	617,796	485,587,656	28.0357	9.22871	0.0012723	786
787	619,369	487,443,403	28.0535	9.23262	0.0012706	787
788	620,944	489,303,872	28.0713	9.23653	0.0012690	788
789	622,521	491,169,069	28.0891	9.24043	0.0012674	789
790	624,100	493,039,000	28.1069	9.24434	0.0012658	790
791	625,681	494,913,671	28.1247	9.24823	0.0012642	791
792	627,264	496,793,088	28.1425	9.25213	0.0012626	792
793	628,849	498,677,257	28.1603	9.25602	0.0012610	793
794	630,436	500,566,184	28.1780	9.25991	0.0012594	794
795	632,025	502,459,875	28.1957	9.26380	0.0012579	795
796	633,616	504,358,336	28.2135	9.26768	0.0012563	796
797	635,209	506,261,573	28.2312	9.27156	0.0012547	797
798	636,804	508,169,592	28.2489	9.27544	0.0012531	798
799	638,401	510,082,399	28.2666	9.27931	0.0012516	799
8∞	640,000	512,000,000	28.2843	9.28318	0.0012500	800

No. Square Cube Sq. Root Cube Root Reciprocal 801 641,601 513,922,401 28.3019 9.28704 0.0012484 802 643,204 515,849,608 28.3196 9.29091 0.0012469 803 644,809 517,781,627 28.3373 9.29477 0.0012453 804 646,416 519,718,464 28.3549 9.29862 0.0012438	No. 801 802 803 804 805
802 643,204 515,849,608 28.3196 9.29091 0.0012469 803 644,809 517,781,627 28.3373 9.29477 0.0012453	802 803 804
803 644,809 517,781,627 28.3373 9.29477 0.0012453	803 804
	804
804 646,416 519,718,464 28,3549 9,20862 9,0012428	
,, , ,,,,,, , ,,,,,,, , ,,,,,,,,,,,,	805
805 648,025 521,660,125 28.3725 9.30248 0.0012422	
806 649,636 523,606,616 28.3901 9.30633 0.0012407	806
807 651,249 525,557,943 28.4077 9.31018 0.0012392	807
808 652,864 527,514,112 28.4253 9.31402 0.0012376	808
809 654,481 529,475,129 28.4429 9.31786 0.0012361	809
810 656,100 531,441,000 28.4605 9.32170 0.0012346	810
811 657,721 533,411,731 28.4781 9.32553 0.0012330	811
812 659,344 535,387,328 28.4956 9.32936 0.0012315	812
813 660,969 537,367,797 28.5132 9.33319 0.0012300	813
814 662,596 539,353,144 28.5307 9.33702 0.0012285	814
815 664,225 541,343,375 28.5482 9.34084 0.0012270	815
816 665,856 543,338,496 28.5657 9.34466 0.0012255	816
817 667,489 545,338,513 28.5832 9.34847 0.0012240	817
818 669,124 547,343,432 28.6007 9.35229 0.0012225	818
819 670,761 549,353,259 28.6182 9.35610 0.0012210	819
820 672,400 551,368,000 28.6356 9.35990 0.0012195	820
821 674,041 553,387,661 28.6531 9.36370 0.0012180	821
822 675,684 555,412,248 28.6705 9.36751 0.0012165	822
823 677,329 557,441,767 28.6880 9.37130 0.0012151	823
824 678,976 559,476,224 28.7054 9.37510 0.0012136	824
825 680,625 561,515,625 28.7228 9.37889 0.0012121	825
826 682,276 563,559,976 28.7402 9.38268 0.0012107	826
827 683,929 565,609,283 28.7576 9.38646 0.0012092	827
828 685,584 567,663,552 28.7750 9.39024 0.0012077	828
829 687,241 569,722,789 28.7924 9.39402 0.0012063	829
830 688,900 571,787,000 28.8097 9.39780 0.0012048	830
831 690,561 573,856,191 28.8271 9.40157 0.0012034	831
832 692,224 575,930,368 28.8444 9.40534 0.0012019	832
833 693,889 578,009,537 28.8617 9.40911 0.0012005	833
834 695,556 580,093,704 28.8791 9.41287 0.0011990	834
835 697,225 582,182,875 28.8964 9.41663 0.0011976	835
836 698,896 584,277,056 28.9137 9.42039 0.0011962	836
837 700,569 586,376,253 28.9310 9.42414 0.0011947	837
838 702,244 588,480,472 28.9482 9.42789 0.0011933	838
$839 \mid 703,921 \mid 590,589,719 \mid 28.9655 \mid 9.43164 \mid 0.0011919$	839
840 705,600 592,704,000 28.9828 9.43538 0.0011905	840
841 707,281 594,823,321 29.000 9.43913 0.0011891	841
842 708,964 596,947,688 29.0172 9.44287 0.0011876	842
843 710,649 599,077,107 29.0345 9.44661 0.0011862	843
844 712,336 601,211,584 29.0517 9.45034 0.0011848	844
845 714,025 603,351,125 29.0689 9.45407 0.0011834	845
846 715,716 605,495,736 29.0861 9.45780 0.0011820	846
847 717,409 607,645,423 29.1033 9.46152 0.0011806	847
848 719,104 609,800,192 29.1204 9.46525 0.0011792	848
849 720,801 611,960,049 29.1376 9.46897 0.0011779	849
850 722,500 614,125,000 29.1548 9.47268 0.0011765	850

Powers, Roots and Reciprocals

No. Square Cube Sq. Root Cube Root Reciprocal 851 724,201 616,295,051 29.1719 9.47640 0.0011751 852 725,904 618,470,208 29.1890 9.48011 0.0011737	No. 851 852 853
852 725,904 618,470,208 29.1890 9.48011 0.0011737	852 853
	853
853 727,609 620,650,477 29.2062 9.48381 0.0011723	
854 729,316 622,835,864 29.2233 9.48752 0.0011710	854
855 731,025 625,026,375 29.2404 9.49122 0.0011696	855
856 732,736 627,222,016 29.2575 9.49492 0.0011682	856
857 734,449 629,422,793 29.2746 9.49861 0.0011669	857
858 736,164 631,628,712 29.2916 9.50231 0.0011655	858
859 737,881 633,839,779 29.3087 9.50600 0.0011641	859
860 739,600 636,056,000 29.3258 9.50969 0.0011628	860
861 741,321 638,277,381 29.3428 9.51337 0.0011614	861
862 743,044 640,503,928 29.3598 9.51705 0.0011601	862
863 744,769 642,735,647 29.3769 9.52073 0.0011587	863
864 746,496 644,972,544 29.3939 9.52441 0.0011574	864
865 748,225 647,214,625 29.4109 9.52808 0.0011561	865
866 749,956 649,461,896 29.4279 9.53175 0.0011547	866
867 751,689 651,714,363 29.4449 9.53542 0.0011534	867
868 753,424 653,972,032 29.4618 9.53908 0.0011521	868
869 755,161 656,234,909 29.4788 9.54274 0.0011507	869
870 756,900 658,503,000 29.4958 9.54640 0.0011494	870
871 758,641 660,776,311 29.5127 9.55006 0.0011481	871
872 760,384 663,054,848 29.5296 9.55371 0.0011468	872
873 762,129 665,338,617 29.5466 9.55736 0.0011455	873
874 763,876 667,627,624 29.5635 9.56101 0.0011442	874
875 765,625 669,921,875 29.5804 9.56466 0.0011429	875
876 767,376 672,221,376 29.5973 9.56830 0.0011416	876
877 769,129 674,526,133 29.6142 9.57194 0.0011403	877
878 770,884 676,836,152 29.6311 9.57557 0.0011390	878
879 772,641 679,151,439 29.6479 9.57921 0.0011377	879
880 774,400 681,472,000 29.6648 9.58284 0.0011364	880
881 776,161 683,797,841 29.6816 9.58647 0.0011351	881
882 777,924 686,128,968 29.6985 9.59009 0.0011338	882
883 779,689 688,465,387 29.7153 9.59372 0.0011325.	883
884 781,456 690,807,104 29.7321 9.59734 0.0011312	884
885 783,225 693,154,125 29.7489 9.60095 0.0011299	885
886 784,996 695,506,456 29.7658 9.60457 0.0011287	886
887 786,769 697,864,103 29.7825 9.60818 0.0011274	8S7
888 788,544 700,227,072 29.7993 9.61179 0.0011261	888
889 790,321 702,595,369 29.8161 9.61540 0.0011249	889
890 792,100 704,969,000 29.8329 9.61900 0.0011236	890
891 793,881 707,347,971 29.8496 9.62260 0.0011223	891
892 795,664 709,732,288 29.8664 9.62620 0.0011211	892
893 797,449 712,121,957 29.8831 9.62980 0.0011198	893
894 799,236 714,516,984 29.8998 9.63339 0.0011186	894
895 801,025 716,917,375 29.9166 9.63698 0.0011173	895
896 802,816 719,323,136 29.9333 9.64057 0.0011161	896
897 804,609 721,734,273 29.9500 9.64415 0.0011148	897
898 806,404 724,150,792 29.9666 9.64774 0.0011136	898
899 808,201 726,572,699 29.9833 9.65132 0.0011123	899
900 810,000 729,000,000 30.0000 9.65489 0.0011111	900

No. Square Cube Sq. Root Cube Root Reciprocal No.							
902 813,604 733,870,808 30.0333 9.66204 0.0011086 902 903 815,409 736,314,327 30.0500 9.66561 0.0011074 903 904 817,216 38,763,764 30.0666 9.66918 0.0011074 903 905 819,025 741,217,625 30.0832 9.67274 0.0011050 905 822,649 746,142,643 30.164 9.67986 0.0011038 906 907 822,649 746,142,643 30.1164 9.67986 0.0011035 907 822,649 746,142,643 30.1164 9.67986 0.0011035 909 908 82,4,644 748,613,312 30.1330 9.68342 0.0011031 909 910 828,100 753,571,000 30.1662 9.69052 0.001095 911 829,921 756,058,031 30.1828 9.69407 0.0011091 909 911 829,921 756,058,031 30.1828 9.69407 0.0010977 911 912 831,744 758,550,528 30.1993 9.69762 0.0010955 912 913 833,569 761,048,497 30.2159 9.70116 0.0010953 913 833,569 763,551,944 30.2324 9.70470 0.0010941 914 835,396 763,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2830 9.71531 0.001095 917 919 844,561 776,151,559 30.3150 9.72236 0.0010858 919 920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 821,454 781,229,961 30.3480 9.73946 0.0010834 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010879 926 857,476 794,022,776 30.4392 9.74699 0.001078 927 928 861,184 799,178,752 30.4651 9.75409 0.001078 927 939 881,124 82,529,3672 30.4593 9.75400 0.001078 923 938 861,184 799,178,752 30.4651 9.75409 0.001078 933 938 864,900 804,357,000 30.4959 9.75500 0.001076 938 939 881,721 80,9558,804 30.5494 9.75499 0.001078 939 936 864,900 804,357,000 30.4959 9.75400 0.001076 938 939 881,721 82,936,013 30.6431 9.77499 0.001078 939 936 876,096 820,25,856 30.5974 9.78950 0.001061 934 939 881,721 82,936,019 30.6431 9.77499 0.001079 934 935 881,721 82,936,013 30.6757 9.79933 0.0010661 938 939 881,721 82,936,013 30.6431 9.79933 0.0010661 938 939 88	No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
903 815,409 736,314,327 30.0500 9.66561 0.0011074 903 904 817,216 738,763,764 30.0666 9.66918 0.0011061 904 905 819,025 741,217,625 30.0682 9.66927 0.0011050 906 820,836 743,677,416 30.0998 9.67630 0.0011038 906 907 822,649 746,142,643 30.1164 9.67986 0.0011075 907 908 824,464 748,613,312 30.1130 9.68342 0.0011013 908 909 826,281 751,089,429 30.1496 9.68697 0.0011013 908 910 828,100 753,571,000 30.1662 9.69052 0.0010989 910 911 829,921 756,658,631 30.1662 9.69052 0.0010989 911 912 831,744 758,550,528 30.1993 9.69762 0.0010955 912 913 833,569 761,048,497 30.2159 9.70116 0.0010953 913 914 835,396 763,551,944 30.2324 9.70470 0.0010913 914 915 837,225 766,660,875 30.2490 9.70824 0.0010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2820 9.71531 0.001095 917 918 842,724 773,620,632 30.2985 9.71884 0.001093 918 919 844,561 776,151,559 30.3150 9.7236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72386 0.0010881 919 921 848,241 781,229,961 30.3480 9.73941 0.0010884 922 850,084 783,777,448 30.3645 9.73294 0.001088 921 922 850,084 783,777,448 30.3645 9.73294 0.001083 918 923 851,929 786,330,467 30.3809 9.73643 0.0010884 923 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 925 855,625 791,453,125 30.4469 9.73996 0.0010834 923 926 857,476 794,022,776 30.4392 9.74699 0.0010787 927 927 889,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4463 9.75049 0.0010787 927 929 863,041 80,765,089 30.4795 9.75750 0.0010764 928 930 866,624 809,557,568 30.5287 9.7699 0.0010793 936 931 866,761 80,694,491 30.5123 9.76450 0.0010753 939 933 870,489 812,166,237 30.4959 9.75840 0.0010764 939 934 872,356 847,805,04 30.5614 9.77999 0.0010764 939 935 874,225 817,400,375 30.577 9.79933 0.0010650 939 936 8876,096 820,25,856 30.5914 9.79396 0.0010651 938 937 877,969 832,656,953 30.6105 9.78891 0.0010664 943 944 883,484 833,337,621 30.6757 9.79933 0.0010650 947 948 889,704 899,704 85,791,392 30.7734 9.80010 0.0010537 949 948 898,704 899,706 85,670,349 30.8058 9.82703 0.0010537 94	901	811,801	731,432,701	30.0167	9.65847	0.0011099	100
904 817,216 738,763,264 30.0666 9.66918 0.0011062 904 905 819,025 741,217,625 30.0832 9.67274 0.0011050 905 820,836 743,677,416 30.0998 9.67630 0.0011038 906 907 822,649 746,142,643 30.1164 9.67986 0.0011038 906 907 822,649 746,142,643 30.1360 9.68342 0.0011013 908 909 826,281 751,089,429 30.1496 9.68697 0.0011001 909 910 828,100 753,571,000 30.1662 9.69052 0.0010989 910 911 839,921 756,058,031 30.1828 9.69407 0.0010977 911 912 831,744 758,550,528 30.1923 9.69407 0.0010977 911 912 831,744 758,550,528 30.1923 9.69407 0.0010973 913 833,569 761,048,497 30.2159 9.70116 0.0010933 913 913 833,569 761,048,497 30.2159 9.70116 0.0010933 913 915 837,225 766,056,875 30.2490 9.70824 0.0010929 915 837,225 766,056,875 30.2490 9.70824 0.0010929 915 824,2724 773,650,632 30.2850 9.71531 0.0010905 917 840,889 771,095,213 30.2850 9.71531 0.0010905 917 918 842,724 773,650,632 30.2850 9.71531 0.0010905 917 918 842,724 773,650,632 30.2850 9.71531 0.0010905 917 918 844,561 776,151,559 30.3150 9.72236 0.0010881 919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 922 850,084 783,777,448 30.3645 9.73293 0.0010840 922 83,3776 786,838,0467 30.3809 9.73645 0.0010834 923 924 853,776 786,838,0467 30.3809 9.73645 0.0010834 923 924 853,776 786,839,0467 30.3809 9.73645 0.0010834 923 926 857,476 794,022,776 30.4302 9.73690 0.0010939 926 927 859,329 796,597,983 30.4959 9.73645 0.0010811 925 926 857,476 794,022,776 30.4302 9.73690 0.0010939 926 927 859,329 796,597,983 30.4959 9.75100 0.001078 927 929 863,041 807,765,089 30.4959 9.75100 0.001078 927 928 861,184 799,178,752 30.4302 9.776,99 0.001079 926 927 859,329 796,597,983 30.4959 9.75100 0.001078 927 928 861,184 809,557,568 30.4979 9.75900 0.001079 926 927 899,329 796,597,983 30.4959 9.75100 0.001078 927 928 861,184 809,557,568 30.5879 9.75900 0.001078 927 928 861,184 809,557,568 30.5879 9.75900 0.001078 929 936 861,900 804,357,000 30.4959 9.75100 0.001076 928 939 881,721 80,905,804 80,755,804 80,905,804 90,905,804 80,755,804 80,905,804 90,905,804 80,4357,000 30.4999 9.75100 0.0010769 939 948	902	813,604	733,870,808	30.0333	9.66204	0.0011086	902
905 819,025 741,217,625 30.0832 9.67274 0.0011050 905 906 820,836 743,677,416 30.0998 9.67630 0.0011038 906 828,2649 746,142,643 30.1164 9.67986 0.0011039 907 82,649 746,142,643 30.1330 9.68342 0.0011013 908 909 826,281 751,089,429 30.1496 9.68697 0.0011001 909 910 828,100 753,571,000 30.1662 9.69052 0.0010939 910 828,100 753,571,000 30.1662 9.69052 0.0010939 910 828,100 753,571,000 30.1629 9.69052 0.0010939 910 828,100 753,571,000 30.1629 9.69407 0.0010977 911 839,921 756,058,031 30.1288 9.69407 0.0010977 911 912 831,744 758,550,528 30.1993 9.69162 0.0010955 912 913 833,569 761,048,497 30.2159 9.70116 0.0010931 914 835,396 763,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 840,889 771,095,213 30.2820 9.71531 0.0010905 917 918 844,561 776,151,559 30.3150 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72941 0.0010858 921 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.75645 0.0010831 925 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 925 855,625 791,453,125 30.4138 9.75400 0.0010767 928 929 863,041 801,765,089 30.4407 9.75049 0.0010787 927 928 861,184 799,178,752 30.4302 9.76150 0.0010767 928 929 863,041 801,765,089 30.4407 9.75049 0.0010787 927 928 861,041 801,765,089 30.4407 9.75049 0.0010767 928 929 863,041 801,765,089 30.4407 9.75049 0.0010767 928 929 863,041 801,765,089 30.4959 9.75100 0.0010767 928 929 863,041 801,765,089 30.4959 9.75100 0.0010767 928 929 863,041 801,765,089 30.4959 9.75100 0.0010767 928 929 863,041 801,765,089 30.4959 9.75100 0.0010767 934 933 874,425 817,400,375 30.5788 9.77849 0.0010769 939 930 864,900 82,455,053 30.505 9.77148 0.0010649 933 939 881,721 82,795,601 30.6010 9.778	903	815,409	736,314,327	30.05∞	9.66561	0.0011074	903
906 820,836 743,677,416 30.098 9.67630 0.0011038 906 907 821,649 746,142,643 30.1164 9.67986 0.0011025 907 824,464 748,613,312 30.1330 9.68432 0.0011031 908 909 826,281 751,089,429 30.1496 9.68697 0.0011001 909 910 828,100 753,571,000 30.1662 9.69652 0.0010989 910 911 829,921 756,058,631 30.1828 9.69407 0.0010975 911 912 831,744 758,550,528 30.1993 9.69762 0.0010965 912 913 833,569 761,048,497 30.2159 9.70116 0.0010953 913 914 835,396 765,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 840,889 771,095,213 30.2850 9.71531 0.0010939 917 918 844,561 776,151,559 30.3150 9.72336 0.0010881 919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 844,561 776,151,559 30.3150 9.72236 0.0010870 920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010864 922 850,084 783,777,448 30.3645 9.73293 0.0010870 920 924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 853,776 794,022,776 30.4302 9.74599 0.0010787 925 855,625 791,453,125 30.4467 9.75049 0.0010787 927 889,329 976,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75049 0.0010787 927 928 861,184 89,575,688 30.584 9.77509 0.0010764 929 933 864,900 804,357,000 30.4959 9.75050 0.0010787 927 936,597,983 30.4959 9.75050 0.0010787 927 928 861,044 881,186 80,595,586 30.5941 9.75049 0.0010787 934 933 870,489 812,166,237 30.5459 9.77540 0.0010787 937 938 866,761 806,954,491 30.5123 9.76450 0.0010787 937 938 886,244 895,257,568 30.5941 9.75049 0.0010787 937 938 886,248 885,248,650,358,600 30.6534 9.78591 0.0010661 938 939 881,721 82,356,888 30.586 9.78891 0.0010661 938 939 881,721 82,356,888 30.586 9.88667 0.0010661 934 949 883,600 830,584,000 30.6594 9.79586 0.	904	817,216	738,763,264	30.0666	9.66918	0.0011062	904
907 822,649 746,142,643 30.1164 9.67986 0.0011025 907 908 824,464 748,613,312 30.1330 9.68342 0.0011013 908 909 826,281 751,089,429 30.1496 9.68697 0.0011031 909 910 828,100 753,571,000 30.1662 9.69052 0.0010989 910 911 829,921 756,058,031 30.1828 9.69407 0.0010977 911 912 831,744 738,550,528 30.1993 9.69762 0.0010955 912 913 833,569 761,048,497 30.2134 9.70470 0.0010937 913 914 835,396 765,551,944 30.2324 9.70470 0.0010931 914 915 837,225 766,060,875 30.2490 9.70824 0.0010931 914 915 837,225 766,060,875 30.2490 9.70824 0.0010931 914 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2820 9.71531 0.0010905 917 918 842,724 773,620,632 30.2985 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.7236 0.0010881 919 920 846,400 778,688,000 30.3315 9.7236 0.0010870 920 921 848,241 781,229,961 30.3480 9.73941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010832 924 925 855,625 791,453,125 30.4138 9.74348 0.0010832 924 926 857,476 794,022,776 30.4302 9.74699 0.0010789 926 927 859,329 96,597,983 30.4467 9.75049 0.0010789 926 928 861,184 799,178,752 30.4302 9.74699 0.0010789 927 928 863,041 801,765,089 30.4795 9.75750 0.0010769 928 929 863,041 801,765,089 30.4795 9.75750 0.0010769 928 930 864,900 804,357,000 30.4959 9.76100 0.0010787 927 930 864,900 804,357,000 30.4959 9.75150 0.0010761 931 932 868,024 809,557,568 30.5287 9.77148 0.0010797 934 933 870,489 812,166,237 30.5450 9.77148 0.0010797 934 935 874,225 817,400,375 30.5778 9.77895 0.0010649 935 936 876,096 820,025,856 30.5941 9.78195 0.0010692 935 937 877,969 822,656,953 30.6105 9.78891 0.0010604 933 938 879,844 825,293,672 30.6381 9.79896 0.0010695 935 939 881,721 827,936,019 30.6431 9.79239 0.0010604 933 939 881,721 827,936,019 30.6331 9.79239 0.0010604 933 940 883,600 830,584,000 30.6394 9.79586 0.0010639 935 940 883,600 830,584,000 30.6994 9.79586 0.0010699 935 940 883,600 830,584,000 30.6994 9.79586 0.0010699 9	905	819,025	741,217,625	30.0832	9.67274	0.0011050	905
908 824,464 748,613,312 30.1330 9.68342 0.0011013 908 909 826,281 751,089,429 30.1496 9.68697 0.0011021 909 910 828,100 753,571,000 30.1662 9.69052 0.0010989 910 911 829,921 756,058,031 30.1828 9.69407 0.0010977 911 912 831,744 758,550,528 30.1993 9.69762 0.0010955 912 913 833,569 761,048,497 30.2159 9.70116 0.0010953 913 914 835,396 763,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010929 915 917 840,889 771,095,213 30.2830 9.71531 0.0010929 917 918 842,724 773,620,632 30.2855 9.71177 0.0010917 916 918 842,724 773,620,632 30.2855 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 921 848,241 748,229,61 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 853,776 788,889,024 30.3974 9.73996 0.0010834 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 926 857,476 794,022,776 30.4330 9.74590 0.001076 928 929 863,041 801,765,089 30.4438 9.75049 0.001078 929 926 857,476 794,022,776 30.4330 9.75049 0.001078 929 929 863,041 801,765,089 30.4795 9.7550 0.001076 928 929 863,041 801,765,089 30.4795 9.7550 0.001076 928 929 863,041 801,765,089 30.4795 9.7550 0.001076 928 933 864,900 804,357,000 30.4959 9.76100 0.001075 939 931 866,761 806,954,491 30.5123 9.76450 0.001076 928 935 874,422 877,403,375 30.5450 9.77148 0.001076 938 933 870,489 812,166,237 30.5450 9.77846 0.001076 938 933 870,489 812,166,237 30.5450 9.77846 0.001076 939 936 870,096 822,656,953 30.5941 9.77846 0.001076 939 936 870,096 822,656,953 30.5078 9.77846 0.0010652 939 936 870,096 822,656,953 30.5079 9.77846 0.0010769 935 936 870,096 822,656,953 30.5079 9.77846 0.0010659 935 936 870,096 822,656,953 30.5079 9.77846 0.0010672 937 938 879,844 825,293,672 30.6689 9.78891 0.0010604 943 944 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.5920 9.8280 0.0010604 943 944 889,704 849,916 846,590,536 30.7571 9.81666 0.0010571 946 894,916 846	906	820,836	743,677,416	30.0998	9.67630	0.∞11038	906
909 826,281 751,089,429 30.1496 9.68697 0.0011001 909 910 828,100 753,571,000 30.1662 9.69052 0.0010989 910 911 829,921 756,058,031 30.1828 9.69407 0.0010979 911 912 831,744 758,550,528 30.1993 9.69762 0.0010965 912 913 833,569 761,018,497 30.2159 9.70116 0.0010953 913 914 835,396 763,551,944 30.2324 9.70470 0.0010941 915 915 837,225 766,060,875 30.2490 9.70824 0.0010941 916 917 840,889 771,095,213 30.2850 9.71177 0.0010917 916 917 840,889 771,095,213 30.2850 9.71531 0.0010905 917 918 842,724 773,620,632 30.2985 9.71184 0.001093 918 919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72236 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010876 922 923 851,939 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 925 855,625 791,453,125 30.4138 9.75409 0.0010838 925 926 857,476 794,022,776 30.4302 9.74699 0.0010838 925 928 861,184 799,178,752 30.4631 9.75400 0.0010787 927 928 863,041 801,765,089 30.4959 9.75100 0.0010787 927 929 863,041 801,765,089 30.4959 9.75100 0.0010787 927 930 864,900 804,337,000 30.4959 9.76150 0.0010730 932 933 864,900 804,337,000 30.4959 9.76450 0.0010730 932 934 865,624 809,557,568 30.5287 9.76450 0.0010741 931 935 868,696 820,025,856 30.5941 9.78495 0.0010749 935 936 879,964 825,936,72 30.5614 9.77497 0.0010769 935 937 879,969 822,656,953 30.6105 9.78543 0.001064 939 938 879,844 825,293,672 30.5618 9.78543 0.0010769 935 938 874,225 817,400,375 30.5778 9.77939 0.0010769 935 938 879,844 825,293,672 30.668 9.78543 0.001064 933 938 879,844 825,293,672 30.668 9.78543 0.001064 943 944 885,481 833,237,621 30.6757 9.79933 0.0010604 943 945 889,249 838,561,807 30.694 9.79586 0.0010694 943 946 894,916 846,590,536 30.7714 9.82012 0.001050 947 947 896,809 847,8123 30.7896 9.82357 0.001050 949 948 894,916 846,590,536 30.7714 9.82012 0.001050 947 948 894,916 846,590,536 30.7734 9.82012 0.0010549 949 948 898,704 899,0601 854,670,349 30.8058 9.82377 0.0010549 949	907	822,649	746,142,643	30.1164	9.67986	0.0011025	907
910 828,100 753,571,000 30.1662 9.69052 0.0010989 910 911 829,921 756,058,031 30.1828 9.69407 0.0010965 912 831,744 758,550,528 30.1933 9.69762 0.0010965 912 913 833,569 761,048,497 30.2159 9.70116 0.0010953 913 914 835,396 763,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2820 9.71531 0.0010905 917 918 842,724 773,620,632 30.2855 9.71183 0.0010803 918 919 844,561 776,151,559 30.3150 9.72236 0.0010801 919 920 846,400 778,688,000 30.3315 9.72236 0.0010807 920 921 848,241 781,229,961 30.3480 9.72941 0.0010870 920 922 850,084 783,777,448 30.3645 9.73293 0.0010870 920 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.001082 923 925 855,625 791,453,125 30.4138 9.74348 0.0010812 925 926 857,476 794,022,776 30.4302 9.74699 0.001079 926 927 859,329 796,597,983 30.4677 9.75049 0.001079 927 928 861,184 799,178,752 30.4631 9.75400 0.001075 928 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.001075 933 931 866,761 806,954,491 30.5123 9.76450 0.001073 932 933 870,489 812,166,237 30.5450 9.77148 0.0010769 935 934 872,255 817,400,375 30.5450 9.77148 0.0010769 935 935 874,225 817,400,375 30.5778 9.77699 0.0010793 935 936 876,096 820,025,856 30.5941 9.7895 0.0010672 935 937 877,969 822,656,953 30.6628 9.78581 0.0010672 935 938 879,844 825,233,672 30.6268 9.78581 0.0010672 935 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 834,851,800 30.6994 9.79886 0.0010672 935 940 883,600 836,84,000 30.6994 9.79886 0.0010672 935 940 883,601 833,851,807 30.7083 9.80677 0.0010679 947 942 887,364 833,8361,807 30.7083 9.80677 0.0010679 947 943 889,496 844,9278,123 30.7734 9.82012 0.001050 947 944 887,364 833,8361,807 30.7898 9.80607 0.001050 947 948 894,916 846,590,536 30.7794 9.82012 0.001050 947 948 894,916 846,590,536 30.7794 9.82012 0.001050 947 948 894,916 846,590,536 30.7794 9.82012 0.0010507 949	908		748,613,312	30.1330	9.68342	0.0011013	908
911 829,921 756,058,031 30.1828 9.69407 0.0010977 911 912 831,744 758,550,528 30.1993 9.69762 0.0010965 912 913 833,569 761,048,497 30.2159 9.70116 0.0010953 913 914 835.396 763,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2820 9.71531 0.0010905 917 918 842,724 773,620,632 30.2985 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.72236 0.0010893 918 920 846,400 778,688,000 30.3315 9.72236 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010846 922 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 924 853,776 794,022,776 30.4302 9.74699 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010787 927 928 863,041 801,765,089 30.4957 9.75509 0.0010787 927 929 863,041 801,765,089 30.4959 9.756100 0.0010787 927 929 863,040 804,357,000 30.4959 9.76100 0.0010783 930 931 866,761 806,954,491 30.5123 9.76450 0.0010730 933 870,489 812,166,237 30.5450 9.77148 0.0010730 933 933 870,489 812,166,237 30.5450 9.77148 0.0010730 933 934 872,356 814,780,504 30.514 9.77497 0.0010707 934 935 874,225 817,400,375 30.5159 9.78550 0.0010707 934 937 877,969 822,656,953 30.6105 9.78541 9.79239 0.0010707 934 938 874,225 817,400,375 30.5159 9.78595 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010607 937 940 883,600 830,584,000 30.6594 9.79586 0.0010610 942 943 889,249 838,561,807 30.06594 9.79586 0.0010610 942 944 887,364 835,896,888 30.6920 9.80280 0.0010616 942 945 894,916 846,590,536 30.7734 9.82012 0.0010509 947 948 894,916 846,590,536 30.7734 9.82012 0.0010509 947 948 894,916 846,590,536 30.7734 9.82012 0.0010509 947 948 894,916 846,590,536 30.7734 9.82012 0.0010509 947 948 994,916 846,590,536 30.7734 9.82012 0.0010509 947 948 994,916 846,590,536 30.7734 9.82012 0.0010507 949	909	826,281	751,089,429	30.1496	9.68697	0.0011001	909
912 831,744 758,550,528 30.1993 9.69762 0.0010965 912 913 833,569 761,048,497 30.2159 9.70116 0.0010933 913 914 835,396 763,551,944 30.2324 9.70470 0.0010941 915 837,225 766,060,875 30.2490 9.70824 0.0010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2830 9.71531 0.0010905 917 918 842,724 773,620,632 30.2985 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72589 0.0010881 919 920 846,400 778,688,000 30.3350 9.72340 0.0010883 921 921 849,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010846 922 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 925 855,625 791,453,125 30.4138 9.74348 0.0010813 924 925 855,625 791,453,125 30.4438 9.74348 0.0010813 924 926 857,476 794,022,776 30.4302 9.74699 0.0010799 926 927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4651 9.75500 0.0010769 928 929 863,041 801,765,089 30.4795 9.75750 0.001076 928 930 864,900 804,357,000 30.4959 9.76150 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010718 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.001071 931 933 870,489 812,166,237 30.5514 9.77846 0.001071 934 935 874,225 817,400,375 30.5778 9.77846 0.0010707 934 937 877,969 822,656,953 30.5941 9.77846 0.001061 938 939 881,721 827,936,019 30.6431 9.7986 0.0010707 934 938 879,844 825,293,672 30.6268 9.78891 0.0010652 937 940 883,600 830,584,000 30.6954 9.79586 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010627 941 943 889,249 888,561,807 30.7809 9.80637 0.0010627 941 944 891,136 841,232,384 30.7246 9.80974 0.0010539 944 945 893,025 843,908,625 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010539 945 948 899,704 891,976,399 30.8058 9.82357 0.0010539 949 949 900,601 854,670,349 30.8058 9.82357 0.0010537 949	910	828,1∞	753,571,000	30. 1662	9.69052	0.0010989	910
913 833,569 761,048,497 30.2159 9.70116 0.0010953 913 914 835,396 763,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010929 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2820 9.71531 0.0010905 917 918 842,724 773,620,632 30.2985 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72236 0.0010887 920 921 848,241 781,229,961 30.3480 9.72941 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 778,888,0024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010799 926 927 859,329 796,597,983 30.4467 9.75049 0.0010799 926 927 859,329 796,597,983 30.4467 9.75049 0.0010776 928 929 863,041 801,765,089 30.4959 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010763 932 931 866,61 806,954,491 30.5123 9.76450 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010763 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 935 874,1225 817,400,375 30.5778 9.77846 0.0010718 933 936 876,096 820,225,856 30.5941 9.78951 0.0010661 938 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6131 9.78951 0.0010661 938 930 881,721 827,936,019 30.6268 9.78891 0.0010661 938 930 881,721 827,936,019 30.6131 9.79890 0.0010661 942 887,364 835,896,888 30.6920 9.80280 0.0010661 942 887,364 835,896,888 30.6920 9.80280 0.0010661 942 887,364 885,481 833,237,621 30.6757 9.79933 0.0010659 941 885,481 833,237,621 30.6757 9.79933 0.0010659 944 885,481 833,237,621 30.6757 9.79933 0.0010659 944 887,364 885,896,888 30.6920 9.80280 0.0010661 942 887,364 889,299 884,561,807 30.7734 9.80212 0.0010659 944 891,136 841,232,384 30.7246 9.80970 0.0010539 944 891,136 841,2	911	829,921	756,058,031	30.1828	9.69407	0.0010977	911
914 835,396 763,551,944 30.2324 9.70470 0.0010941 914 915 837,225 766,060,875 30.2490 9.70824 0.0010939 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 840,889 771,095,213 30.2820 9.71531 0.0010905 917 918 842,724 773,620,632 30.2985 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.72236 0.0010870 920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 848,241 781,229,961 30.3480 9.73293 0.0010870 921 848,241 781,229,961 30.3809 9.73645 0.0010834 923 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010811 925 927 859,329 796,597,983 30.4467 9.75049 0.0010811 925 928 861,184 799,178,752 30.4631 9.75400 0.0010787 927 928 863,041 801,765,089 30.4795 9.75750 0.0010760 929 930 864,900 804,357,000 30.4959 9.76100 0.0010763 930 931 866,761 806,954,491 30.5123 9.76450 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010763 931 932 868,624 809,557,568 30.5287 9.76799 0.0010763 933 934 872,356 814,780,504 30.5614 9.77497 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010718 933 935 874,222 817,400,375 30.5778 9.77846 0.0010619 938 937 877,969 822,656,953 30.5941 9.78495 0.0010661 938 939 881,721 827,936,019 30.6431 9.79586 0.0010627 937 938 879,844 825,293,672 30.6268 9.78891 0.0010661 938 939 881,721 827,936,019 30.6331 9.79239 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.694 9.79586 0.0010627 941 944 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,494 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010619 943 940 883,600 830,584,000 30.6931 9.79586 0.0010639 944 949 889,704 895,809 849,278,123 30.7734 9.80212 0.0010639 944 949 894,1136 841,232,384 30.7246 9.80970 0.0010537 949 948 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.001053	912	831,744	758,550,528	30.1993	9.69762	0.0010965	912
915 837,225 766,060,875 30.2490 9.70824 0.010929 915 916 839,056 768,575,296 30.2655 9.71177 0.0010917 916 917 840,889 771,095,213 30.2820 9.71531 0.0010905 917 918 842,724 773,620,632 30.2985 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.72236 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 93 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 925 855,625 791,453,125 30.4138 9.74348 0.0010813 925 855,625 791,453,125 30.4138 9.74509 0.0010787 926 857,476 794,022,776 30.4302 9.74699 0.0010787 927 928 861,184 799,178,752 30.4631 9.755049 0.0010787 927 928 861,184 799,178,752 30.4631 9.755049 0.0010787 927 928 864,900 804,357,000 30.4967 9.75504 0.0010787 927 933 866,761 806,964 804,357,000 30.4969 9.76100 0.0010730 933 931 866,761 806,964 804,357,000 30.5123 9.76100 0.0010730 932 933 870,489 812,166,237 30.5133 9.76150 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010741 931 932 868,624 809,557,568 30.5287 9.76199 0.0010741 931 932 868,624 809,557,568 30.5287 9.76199 0.0010730 932 933 870,489 812,166,237 30.5153 9.76150 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,335 874,225 817,400,375 30.5758 9.77846 0.0010695 935 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.7895 0.0010664 938 939 881,721 827,936,019 30.6431 9.79393 0.0010667 939 948 883,600 830,584,000 30.6594 9.79586 0.0010667 939 941 885,481 833,237,621 30.6757 9.79933 0.0010669 935 940 883,600 830,584,000 30.6692 9.80280 0.0010667 942 943 889,249 838,561,807 30.7866 9.78543 0.0010667 942 943 889,249 838,561,807 30.7866 9.78589 0.0010650 949 948 894,916 846,590,536 30.7571 9.81666 0.0010751 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 894,916 894,916 846,590,536 30.7571 9.81666 0.0010571 946 948 894,916 894,916 846,590,536 30.7571 9.81666 0.0010571 946 948 898,704 896,8	913	833,569	761,048,497	30.2159	9.70116	0.0010953	913
916 839,056 768,575,296 30.2655 9.71177 0.0019317 916 917 840,889 771,095,213 30.2820 9.71531 0.001095 917 918 842,724 773,620,632 30.2985 9.71834 0.0010853 918 919 844,561 776,151,559 30.3150 9.72236 0.0010851 919 920 846,400 778,688,000 30.3315 9.72236 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 87,476 794,022,776 30.4302 9.74699 0.0010789 926 927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4531 9.75500 0.0010767 928 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.001073 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5164 9.77497 0.0010730 932 935 874,225 817,400,375 30.5778 9.777846 0.0010730 932 936 876,096 820,025,856 30.5941 9.77897 0.001070 934 937 877,969 822,656,953 30.6105 9.78543 0.001065 935 938 879,844 825,293,672 30.6688 9.78891 0.0010661 938 939 881,721 827,936,019 30.6431 9.79586 0.001065 935 940 883,600 830,584,000 30.6934 9.79586 0.0010659 935 940 883,600 830,584,000 30.6693 9.79586 0.0010659 939 940 883,600 830,584,000 30.6757 9.79933 0.0010650 939 940 883,600 830,584,000 30.6757 9.79933 0.0010661 942 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010639 944 944 889,136 841,232,3384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7571 9.81666 0.0010571 946 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 844,278,123 30.7734 9.82012 0.0010599 948 948 898,704 896,809 844,278,123 30.7734 9.82012 0.0010599 948 948 898,704 896,809 849,778,123 30.7034 9.82012 0.0010599 949	914	835,396	763,551,944	30.2324	9.70470	0.0010941	914
917 840,889 771,095,213 30.2820 9.71531 0.0019905 917 918 842,724 773,620,632 30.2985 9.71884 0.0010893 918 919 844,561 776,151,559 30.3150 9.72236 0.0010870 920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010834 923 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010787 929 920 863,041 801,765,089 30.4959 9.76100 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010753 930 931 872,356 814,780,504 30.5614 9.77497 0.0010730 932 934 872,356 814,780,504 30.5614 9.77497 0.0010730 932 936 874,225 817,400,375 30.5778 9.77846 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 877,969 822,656,953 30.6105 9.78543 0.0010661 938 877,969 822,656,953 30.605 9.78543 0.0010661 938 937 877,969 822,656,953 30.605 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 943 944 8891,136 841,232,3384 30.7246 9.80974 0.0010509 944 945 894,916 846,590,536 30.7571 9.81666 0.0010539 944 945 894,916 846,590,536 30.7571 9.81666 0.0010539 944 948 894,916 846,590,536 30.7571 9.81666 0.0010539 944 948 898,704 851,971,392 30.08088 9.82703 0.0010509 947 948 898,704 851,671,	915	837,225	766,060,875	30. 2490	9.70824	0.0010929	915
918 842,724 773,626,632 30.2985 9.71884 0.001893 918 919 844,861 776,151,559 30.3150 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72236 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010844 923 924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010799 926 927 859,329 796,597,983 30.4467 9.75049 0.0010799 926 928 861,184 799,178,752 30.4631 9.75400 0.0010767 928 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010753 932 933 870,489 812,166,237 30.5450 9.77148 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010753 932 933 874,225 817,400,375 30.5778 9.77846 0.0010797 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.77497 0.0010707 934 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6994 9.79239 0.0010650 939 940 883,600 830,584,000 30.6994 9.79239 0.0010650 939 940 883,600 830,584,000 30.6994 9.79239 0.0010650 939 944 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010639 944 944 887,364 835,896,888 30.6920 9.80280 0.0010616 942 945 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7409 9.81320 0.001050 947 948 898,704 896,809 849,278,123 30.7734 9.82012 0.001050 947 948 898,704 896,809 849,278,123 30.7734 9.82012 0.001050 947 948 898,704 896,809 849,278,123 30.7734 9.82012 0.001050 947 948 898,704 896,809 849,278,123 30.7806 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	916	839,056	768,575,296	30.2655	9.71177	0.0010917	916
919 844,561 776,151,559 30.3150 9.72236 0.0010881 919 920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777.448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010787 927 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010730 932 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010741 931 933 870,489 812,166,337 30.5450 9.77148 0.0010718 933 934 872,335 814,780,504 30.5614 9.77497 0.001070 934 935 874,225 817,400,375 30.5788 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.7846 0.0010695 935 937 877,969 822,656,953 30.6105 9.78543 0.0010662 937 939 881,721 827,936,019 30.6431 9.79896 0.0010664 938 939 881,721 827,936,019 30.6431 9.79933 0.0010650 939 940 883,600 830,584,000 30.6990 9.79933 0.0010650 939 940 883,600 830,584,000 30.6990 9.80280 0.0010619 942 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010639 945 944 891,136 841,234,384 30.7246 9.80974 0.0010693 945 946 894,916 846,590,536 30.7571 9.81666 0.0010519 945 948 898,704 896,809 849,278,123 30.7734 9.82012 0.001050 947 948 898,704 896,809 849,278,123 30.7734 9.82012 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948	917	840,889	771,095,213	30.2820	9.71531	0.0010905	917
920 846,400 778,688,000 30.3315 9.72589 0.0010870 920 921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010789 926 927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010766 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78496 0.0010695 935 936 876,096 820,025,856 30.5941 9.78595 0.0010664 939 936 876,096 820,025,856 30.5941 9.78595 0.0010664 936 937 877,969 822,656,953 30.6105 9.78543 0.0010672 937 938 879,844 825,293,672 30.6688 9.78891 0.0010650 939 940 883,600 830,584,000 30.6431 9.79239 0.0010650 939 948 885,481 833,237,621 30.6757 9.79933 0.0010650 939 941 885,481 833,237,621 30.6757 9.79933 0.0010650 939 941 885,481 833,237,621 30.6757 9.79933 0.0010650 939 948 889,249 838,561,807 30.7083 9.80627 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010650 949 941 885,481 833,237,621 30.6757 9.79933 0.0010650 949 941 885,481 833,237,621 30.6757 9.79933 0.0010650 949 941 885,481 833,237,621 30.6757 9.79933 0.0010650 949 949 889,026 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7806 9.82357 0.0010593 944 948 898,704 896,809 849,278,123 30.7806 9.82357 0.0010593 944 948 898,704 896,809 849,278,123 30.7806 9.82357 0.0010593 944 949 990,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82	918	842,724	773,620,632	30. 2985	9.71884	0.0010893	918
921 848,241 781,229,961 30.3480 9.72941 0.0010858 921 922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010787 927 927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010787 928 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 872,356 814,780,504 30.5614 9.77497 0.001070 934 935 874,225 817,400,375 30.5778 9.77846 0.001079 934 935 876,096 820,025,856 30.5941 9.7846 0.001066 938 937 877,969 822,656,953 30.6105 9.78540 0.001066 938 937 877,969 822,656,953 30.6105 9.78540 0.001066 938 939 881,721 827,936,019 30.6431 9.79239 0.001066 938 939 881,721 827,936,019 30.6431 9.79239 0.001065 938 939 881,721 827,936,019 30.6431 9.79239 0.001065 939 940 883,600 830,584,000 30.6594 9.79586 0.001061 938 934 885,481 833,237,621 30.6757 9.79933 0.001062 941 885,481 833,237,621 30.6757 9.79933 0.001065 939 940 883,600 830,584,000 30.6594 9.79586 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001060 944 887,364 835,896,888 30.6920 9.80280 0.001060 944 887,364 835,896,888 30.6920	919	844,561	776,151,559	30.3150	9.72236	0.0010881	919
922 850,084 783,777,448 30.3645 9.73293 0.0010846 922 923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010799 926 927 859,329 796,597,983 30.4467 9.75049 0.0010797 928 861,184 799,178,752 30.4631 9.75400 0.0010767 928 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010753 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,337 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.777846 0.0010718 933 935 874,225 817,400,375 30.5718 9.77846 0.0010707 934 872,356 82,656,953 30.6105 9.7846 0.0010695 935 936 876,096 820,025,856 30.5941 9.7846 0.0010695 935 936 876,096 820,025,856 30.5941 9.7846 0.0010661 938 81,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.001061 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7586 9.82357 0.001050 947 948 898,704 895,690,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7586 9.82357 0.001050 947 948 898,704 856,600 856,600,300 9.8020 0.001050 947 948 898,704 856,600 856,600,300 9.8020 0.001050 947 948 898,704 856,600 856,600,300 9.8020 0.001050 947 948 898,704 856,600 856,600,300 9.8020 0.001050 947 948 898,704 856,600 856,600,300 9.8020 0.001050 947 948 898,704 856,600 856,600,300 9.8020 0.001050 947 948 898,704 856,600 856,600 856,600 9.8020 0.001050 947 948 898,704 856,600 856,600 856,600 9.8020 0.001050 947 948 999 900,601 854,600,300 9.8	920	846,4∞	778,688,000	30.3315	9.72589	0.0010870	920
923 851,929 786,330,467 30.3809 9.73645 0.0010834 923 924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010787 926 927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010766 928 929 863,041 801,765,089 30.4795 9.75750 0.0010766 928 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010741 931 932 868,624 804,520,000 30.4959 9.76100 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.001070 934 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.77497 0.001070 934 936 876,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6994 9.79933 0.0010650 939 940 883,600 830,584,000 30.6994 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010619 942 887,364 835,896,888 30.6920 9.80280 0.0010619 942 887,364 835,896,888 30.6920 9.80280 0.0010619 943 944 891,136 841,232,384 30.7246 9.80974 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 896,809 849,278,123 30.7806 9.82357 0.0010549 948 898,704 895,600 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	921	848,241	781,229,961	30.3480	9.72941	0.0010858	921
924 853,776 788,889,024 30.3974 9.73996 0.0010823 924 925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010799 926 927 859,329 796,597,983 30.4461 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75049 0.0010787 927 928 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010662 937 938 879,844 825,293,672 30.6488 9.78841 0.0010662 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79933 0.0010652 939 948 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7866 9.82357 0.0010599 948 898,704 851,971,392 30.7806 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601	922	850,084	783,777,448	30.3645	9.73293	0.∞10846	922
925 855,625 791,453,125 30.4138 9.74348 0.0010811 925 926 857,476 794,022,776 30.4302 9.74699 0.0010799 926 927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010764 928 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,1780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010664 936 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 938 940 883,600 830,584,000 30.6594 9.79586 0.0010652 941 885,481 833,237,621 30.6757 9.79933 0.0010652 941 885,481 833,237,621 30.6757 9.79933 0.0010652 941 885,481 833,237,621 30.6757 9.79933 0.0010650 942 887,304 835,896,888 30.6920 9.80280 0.001061 942 887,304 835,896,888 30.6920 9.80280 0.001061 942 943 889,249 838,561,807 30.7083 9.80520 0.0010629 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.001052 945 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.001050 947 948 898,704 851,971,392 30.8058 9.82703 0.0010537 949	923	851,929	786,330,467	30.3809	9.73645	0.0010834	923
926 857,476 794,022,776 30.4302 9.74699 0.0010799 926 927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4631 9.75400 0.0010767 928 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010707 934 936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010662 938 938 879,844 825,293,672 30.6268 9.78891 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010659 939 940 883,600 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010650 939 944 885,481 833,237,621 30.6757 9.79933 0.0010650 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,234,384 30.7246 9.80974 0.0010593 944 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,234,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010509 943 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.001050 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948	924	853,776	788,889,024	30.3974	9.73996	0.0010823	924
927 859,329 796,597,983 30.4467 9.75049 0.0010787 927 928 861,184 799,178,752 30.4651 9.75400 0.0010764 929 863,041 801,765,089 30.4795 9.75750 0.0010764 929 30 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010664 938 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 831,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 83,5584,000 30.6594 9.79586 0.0010650 939 940 883,600 83,5584,000 30.6594 9.79586 0.0010650 939 941 885,481 833,237,621 30.6757 9.79933 0.0010650 939 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.001064 943 944 891,136 841,232,384 30.7246 9.80974 0.001050 943 944 891,136 841,232,384 30.7246 9.80974 0.001050 944 945 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.001050 947 948 898,704 851,971,392 30.7856 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	925	855,625	791,453,125	30.4138	9.74348	0.0010811	925
928 861,184 799,178,752 30.4631 9.754∞ 0.∞10776 928 929 863,041 801,765,089 30.4795 9.75750 0.∞10764 929 930 864,9∞ 804,357,0∞ 30.4959 9.761∞ 0.∞10753 930 931 866,761 806,954,491 30.5123 9.76450 0.∞10741 931 932 868,624 809,557,568 30.5287 9.76799 0.∞10730 932 933 870,489 812,166,237 30.5459 9.77148 0.∞10718 933 934 872,356 814,780,504 30.5614 9.77497 0.∞10707 934 935 874,225 817,4∞,375 30.5778 9.77846 0.∞10695 935 936 876,096 820,025,856 30.5941 9.78195 0.∞10684 936 937 877,969 822,656,953 30.6105 9.78543 0.∞10661 938 939 881,721 827,936,019 30.6431 9.79239 0.∞10650 939 940 883,6∞ 830,584,∞∞ 30.6594 9.79933 0.∞10650 939 940 883,6∞ 830,584,∞∞ 30.6594 9.79933 0.∞10650 939 941 885,481 833,237,621 30.6757 9.79933 0.∞10627 941 942 887,364 835,896,888 30.6920 9.80280 0.∞10616 942 943 889,249 838,561,807 30.7083 9.80627 0.∞10649 943 944 891,136 841,231,384 30.7246 9.80974 0.∞10593 944 945 893,025 843,908,625 30.7409 9.81320 0.∞10582 945 946 894,916 846,590,536 30.7571 9.81666 0.∞10571 946 947 896,8∞9 849,278,123 30.7734 9.82012 0.∞10549 948 898,704 851,971,392 30.7856 9.82357 0.∞10549 948 949 900,601 854,670,349 30.8058 9.82703 0.∞10549 948 949 900,601 854,670,349 30.8058 9.82703 0.∞10549 948 949 900,601 854,670,349 30.8058 9.82703 0.∞10549 948 949 900,601 854,670,349 30.8058 9.82703 0.∞10549 948 949 900,601	926	857,476	794,022,776	30.4302	9.74699	0.0010799	926
929 863,041 801,765,089 30.4795 9.79750 0.0010764 929 930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5459 9.77148 0.0010718 933 934 872,336 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010664 936 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 938 940 883,600 830,584,000 30.6594 9.79586 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010650 942 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7895 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	927	859,329	796,597,983	30.4467	9.75049	0.0010787	927
930 864,900 804,357,000 30.4959 9.76100 0.0010753 930 931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,231,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 989,7061 854,670,349 30.8058 9.82703 0.0010537 949	928	861,184	799,178,752	30.4631	9.754∞	0.0010776	928
931 866,761 806,954,491 30.5123 9.76450 0.0010741 931 932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77149 0.0010707 934 935 874,225 817,400,375 30.5718 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 877,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010650 939 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.001061 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 894,916 846,590,536 30.7367 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010547 948 949 900,601 854,670,349 30.8058 9.82703 0.0010547 948 949 900,601 854,670,349 30.8058 9.82703 0.0010547 948	929	863,041	801,765,089	30.4795	9.75750	0.0010764	929
932 868,624 809,557,568 30.5287 9.76799 0.0010730 932 933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,336 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010672 937 938 879,844 825,293,672 30.6268 9.78891 0.0010667 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010649 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010549 948 898,704 851,971,392 30.7886 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010547 949	930		804,357,000	30.4959	9.761∞	0.0010753	930
933 870,489 812,166,237 30.5450 9.77148 0.0010718 933 934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 0.0010707 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010672 937 938 879,844 825,293,672 30.6268 9.78891 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.83257 0.0010549 948 999 900,601 854,670,349 30.8058 9.82703 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010549 948	931		806,954,491	30.5123	9.76450	0.0010741	931
934 872,356 814,780,504 30.5614 9.77497 0.0010707 934 935 874,225 817,400,375 30.5778 9.77846 0.0010695 935 936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010650 939 940 885,481 833,237,621 30.6757 9.79933 0.0010650 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 887,364 835,896,888 30.6920 9.80280 0.0010616 943 944 891,136 841,232,384 30.7246 9.80974 0.0010509 943 944 891,136 841,232,384 30.7246 9.80974 0.0010509 944 945 893,025 843,908,625 30.7409 9.81320 0.001052 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010500 947 948 898,704 851,971,392 30.7896 9.83357 0.0010549 948 999 900,601 854,670,349 30.8058 9.82703 0.0010537 949	932	868,624	809,557,568	30.5287	9.76799	0.0010730	932
935 874,225 817,4∞,375 30.5778 9.77846 0.∞10695 935 936 876,096 820,025,856 30.5941 9.78195 0.∞10684 936 937 877,969 822,656,953 30.6105 9.78543 0.∞10661 938 939 881,721 827,936,019 30.6431 9.79239 0.∞10661 938 939 881,721 827,936,019 30.6431 9.79239 0.∞10650 939 940 883,6∞ 830,584,∞ 30.6594 9.79586 0.∞10638 940 941 885,481 833,237,621 30.6757 9.79933 0.∞10627 941 942 887,364 835,896,888 30.6920 9.80280 0.∞10616 942 943 889,249 838,561,807 30.7083 9.80627 0.∞10604 943 944 891,136 841,231,384 30.7246 9.80974 0.∞10593 944 945 893,025 843,908,625 30.7409 9.81320 0.∞10582 945 946 894,916 846,590,536 30.7571 9.81666 0.∞10571 946 947 896,8∞9 849,278,123 30.7734 9.82012 0.∞10560 947 948 898,704 851,971,392 30.7896 9.8357 0.∞10549 948 999,601 854,670,349 30.8058 9.82703 0.∞10537 949	933				9.77148	0.0010718	933
936 876,096 820,025,856 30.5941 9.78195 0.0010684 936 937 877,969 822,656,953 30.6105 9.78543 0.0010672 937 938 879,844 825,293,672 30.6268 9.78891 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 83,5584,000 30.6594 9.79586 0.0010650 939 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010610 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7511 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.83357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	934		814,780,504	30.5614	9.77497	0.0010707	934
937 877,969 822,656,953 30.6105 9.78543 0.0010672 937 938 879,844 825,293,672 30.6268 9.78891 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,650 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010616 942 943 889,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010569 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 998,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010557 949							935
938 879,844 825,293,672 30.6268 9.78891 0.0010661 938 939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 850,584,000 30.6594 9.79586 0.0010650 941 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 942 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.83357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949							936
939 881,721 827,936,019 30.6431 9.79239 0.0010650 939 940 883,600 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.83357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949							
940 883,600 830,584,000 30.6594 9.79586 0.0010638 940 941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.83357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	938						938
941 885,481 833,237,621 30.6757 9.79933 0.0010627 941 942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,231,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	939						939
942 887,364 835,896,888 30.6920 9.80280 0.0010616 942 943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949							
943 889,249 838,561,807 30.7083 9.80627 0.0010604 943 944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	1						941
944 891,136 841,232,384 30.7246 9.80974 0.0010593 944 945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949					• 1		
945 893,025 843,908,625 30.7409 9.81320 0.0010582 945 946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949	1						
946 894,916 846,590,536 30.7571 9.81666 0.0010571 946 947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949							
947 896,809 849,278,123 30.7734 9.82012 0.0010560 947 948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949							
948 898,704 851,971,392 30.7896 9.82357 0.0010549 948 949 900,601 854,670,349 30.8058 9.82703 0.0010537 949					• 1		• •
949 900,601 854,670,349 30.8058 9.82703 0.0010537 949							
950 902,500 857,375,000 30.8221 9.83048 0.0010526 950							
	950	902,500	857,375,000	30.8221	9.83048	0.0010526	950

Powers, Roots and Reciprocals

No. Square Cube Sq. Root Cube Root Reciprocal No. Square Cube Sq. Root Cube Root Reciprocal No. Square Sq. Root Cube Root Reciprocal No. Square Sq. Root Sq. Root Sq.
952 906,304 862,801,408 30.8545 9.83737 0.0010504 9 953 908,209 865,523,177 30.8707 9.84081 0.0010493 9 954 910,116 868,250,664 30.8869 9.84425 0.0010493 9 955 912,025 870,983.875 30.9031 9.84769 0.0010471 9 956 913,936 873,722,816 30.9192 9.85113 0.0010460 9 957 915,849 876,467,493 30.9354 9.85456 0.0010449 9 958 917,764 879,217,912 30.9516 9.85799 0.0010438 9 959 919,681 881.974,079 30.9677 9.86142 0.0010428 9 960 921,600 884,736,000 30.9839 9.86485 0.0010417 9 961 923,521 887,503,681 31.000 9.86827 0.0010406 9 962 925,444 890,277,128 31.0161 9.87169 0.0010395 9 963 927,369 893,056,347 31.0322 9.87511 0.0010384 9 964 929,296 895.841,344 31.0483 9.87853 0.0010373 9 965 931,225 888,632,125 31.0644 9.88195 0.0010363 9 966 933,156 901,428,696 31.0805 9.88536 0.0010373 9 967 935,089 904,231,063 31.0966 9.88877 0.0010341 9 968 937,024 907,039,232 31.1127 9.89217 0.0010331 9 969 938,961 999,853,209 31.1288 9.89558 0.0010379 9 970 940,900 912,673,000 31.1448 9.89898 0.0010309 9 971 942,841 915,498,611 31.1609 9.90238 0.0010299 9 972 944,784 918,330,048 31.1769 9.90578 0.0010286 9 973 944,784 918,330,048 31.1769 9.90578 0.0010286 9 974 944,784 918,330,048 31.1769 9.90578 0.0010289 9 975 950,625 926,859,375 31.2250 9.91596 0.0010256 9 976 952,576 924,1167,317 31.1929 9.9918 0.0010277 9 974 948,676 924,010,424 31.2090 9.91257 0.0010267 9 975 950,625 926,859,375 31.2250 9.91596 0.0010256 9 977 954,529 932,574,833 31.2570 9.9274 0.0010235 9 978 958,441 938,313,739 31.2890 9.92950 0.0010215 9 979 958,441 938,313,739 31.2890 9.92950 0.0010215 9
953 908,209 865,523,177 30.8707 9.84081 0.0010493 9.954 910,116 868,250,664 30.8869 9.84425 0.0010482 9.955 912,025 870,983,875 30.9031 9.84769 0.0010482 9.956 913,936 873,722,816 30.9192 9.84769 0.0010449 9.957 915,849 876,467,493 30.9354 9.85456 0.0010449 9.958 917,764 879,217,912 30.9516 9.85799 0.0010438 9.959 919,681 881,974,079 30.9516 9.85799 0.0010438 9.960 921,600 884,736,000 30.9839 9.86485 0.0010428 9.961 923,521 887,503,681 31.0000 9.86827 0.0010406 9.961 923,521 887,503,681 31.000 9.86827 0.0010406 9.962 925,444 890,277,128 31.0161 9.87169 0.0010395 9.963 927,369 893,056,347 31.0322 9.87511 0.0010384 9.964 929,296 895.841,344 31.0483 9.87853 0.0010373 9.965 931,225 886,632,125 31.0644 9.88195 0.0010363 9.966 933,156 901,428,696 31.0805 9.88536 0.0010373 9.966 933,089 904,231,063 31.0966 9.88877 0.0010341 9.969 9.968 937,024 907,039,232 31.1127 9.89217 0.0010331 9.969 9.938,661 909,853,209 31.1288 9.89558 0.0010309 9.970 940,900 912,673,000 31.1448 9.89898 0.0010309 9.971 942,841 915,498,611 31.1609 9.90238 0.0010309 9.971 942,841 915,498,611 31.1609 9.90238 0.0010309 9.971 942,841 915,498,611 31.1609 9.90238 0.0010209 9.972 944,784 918,330,048 31.1769 9.90578 0.0010266 9.972 944,784 918,330,048 31.1769 9.90578 0.0010267 9.972 944,784 918,330,048 31.1769 9.90578 0.0010269 9.972 944,784 918,330,048 31.1769 9.90578 0.0010269 9.972 944,784 918,330,048 31.1769 9.90578 0.0010267 9.973 944,784 918,330,048 31.1769 9.90578 0.0010269 9.975 950,625 926,859,375 31.2250 9.91596 0.0010277 9.974 948,676 924,010,424 31.2090 9.91257 0.0010266 9.975 950,625 926,859,375 31.2250 9.91596 0.0010275 9.976 952,576 924,714,176 31.2410 9.91935 0.0010225 9.978 954,529 932,574,833 31.2570 9.9274 0.0010235 9.978 9.958,441 9.958,441,352 31.2730 9.92612 0.0010225 9.978 9.958,441 9.958,441,352 31.2730 9.92612 0.0010225 9.978 9.958,441 9.958,441,352 31.2730 9.92612 0.0010225 9.979 9.958,441 9.958,441,352 31.2730 9.92612 0.0010225 9.979 9.958,441 9.958,441,352 31.2730 9.92612 0.0010215 9.979 9.958,441 9.958,441,352 31.2730 9.92950
954 910,116 868,250,664 30.8869 9.84425 0.0010482 9.955 912,025 870,983,875 30.9031 9.84769 0.0010471 9.956 913,936 873,722,816 30.9192 9.85113 0.0010460 9.957 915,849 876,467,493 30.9354 9.85456 0.0010449 9.958 917,764 879,217,912 30.9516 9.85799 0.0010438 9.959 919,681 881.974,079 30.9677 9.86142 0.0010428 9.960 921,600 884,736,000 30.9839 9.86485 0.0010417 9.961 923,521 887,503,681 31.000 9.86827 0.0010406 9.925,444 890,277,128 31.0161 9.87169 0.0010395 9.962 925,444 890,277,128 31.0161 9.87169 0.0010395 9.964 929,296 893,056,347 31.0322 9.87511 0.0010384 9.964 929,296 893,841,344 31.0483 9.87853 0.0010373 9.965 931,225 898,632,125 31.0644 9.88195 0.0010363 9.965 931,225 898,632,125 31.0644 9.88195 0.0010363 9.966 933,156 901,428,696 31.0805 9.88576 0.0010341 9.968 9.35,089 904,231,063 31.0966 9.88877 0.0010341 9.969 9.38,961 909,853,209 31.1288 9.89558 0.0010320 9.969 9.38,961 909,853,209 31.1288 9.89558 0.0010320 9.970 940,900 912,673,000 31.1448 9.89898 0.0010320 9.971 942,841 915,498,611 31.1609 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 972 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 972 944,784 918,330,048 31.1769 9.90238 0.0010299 9.971 972 944,784 918,330,048 31.1769 9.90238 0.0010296 9.971 973 944,784 918,330,048 31.1769 9.90238 0.0010296 9.971 974 948,676 924,010,424 31.2090 9.91257 0.0010266 9.971 954,529 932,574,833 31.2250 9.91596 0.0010256 9.971 954,529 932,574,833 31.2250 9.91596 0.0010225 9.971 954,529 932,574,833 31.2250 9.91596 0.0010225 9.971 954,529 932,574,833 31.2250 9.91596 0.0010225 9.971 954,529 932,574,833 31.2250 9.91595 0.0010225 9.971 954,629 932,574,833 31.2250 9.9250 0.0010215 9.9
955 912,025 870,983.875 30.9031 9.84769 0.0010471 9.956 913,936 873,722,816 30.9192 9.85113 0.0010460 9.957 915,849 876,467,493 30.9354 9.85759 0.0010438 9.958 917,764 879,217,912 30.9516 9.85799 0.0010438 9.959 919,681 881,974,079 30.9677 9.86142 0.0010428 9.960 921,600 884,736,000 30.9839 9.86485 0.0010417 9.961 923,521 887,503,681 31.000 9.86827 0.0010406 9.962 925,444 890,277,128 31.0161 9.87169 0.0010395 9.963 927,369 893,056,347 31.0322 9.87511 0.0010395 9.963 927,369 893,056,347 31.0322 9.87511 0.0010395 9.963 927,369 893,056,347 31.0322 9.87511 0.0010395 9.963 927,369 893,6841,344 31.0483 9.87853 0.0010373 9.965 931,225 898,632,125 31.0644 9.88195 0.0010363 9.965 931,225 898,632,125 31.0644 9.88195 0.0010363 9.965 933,156 901,428,696 31.0805 9.88576 0.0010363 9.966 933,156 901,428,696 31.0805 9.88576 0.0010341 9.968 9.37,024 907,039,232 31.11288 9.89578 0.0010341 9.968 937,024 907,039,232 31.11288 9.89578 0.0010341 9.969 9.938,961 909,853,209 31.1288 9.89558 0.0010320 9.970 940,900 912,673,000 31.1448 9.89898 0.0010309 9.971 942,841 915,498,611 31.1609 9.90238 0.0010309 9.971 944,841 915,498,611 31.1609 9.90238 0.0010309 9.971 944,844 918,330,048 31.1769 9.90278 0.0010328 9.971 944,784 918,330,048 31.1769 9.90578 0.0010288 9.971 944,784 918,330,048 31.1769 9.90578 0.0010288 9.971 944,784 918,330,048 31.1769 9.90578 0.0010288 9.971 944,784 918,330,048 31.1769 9.90578 0.0010288 9.971 944,784 918,330,048 31.1769 9.90578 0.0010288 9.971 954,529 921,167,317 31.1929 9.90578 0.0010266 9.971 954,529 921,167,317 31.1929 9.90578 0.0010266 9.971 954,529 921,167,317 31.1929 9.90578 0.0010266 9.971 954,529 932,574,833 31.2250 9.91596 0.0010256 9.971 954,529 932,574,833 31.2250 9.91596 0.0010225 9.971 954,529 932,544,332 31.2750 9.92574 0.0010225 9.971 954,529 932,544,332 31.2750 9.92574 0.0010225 9.971 954,441 938,313,739 31.2890 9.92950 0.0010215 9.971 954,441 938,313,739 31.2890 9.92950 0.0010215 9.971 9.9258,441 938,313,739 31.2890 9.92950 0.0010215 9.971 9.9258,441 9.9258,313,31,319 9.92595 0.0010215 9.971 9.925
956 913,936 873,722,816 30.9192 9.85113 0.0010460 9 957 915,849 876,467,493 30.9354 9.85456 0.0010449 9 958 917,764 879,217,912 30.9516 9.85799 0.0010438 9 959 919,681 881.974,079 30.9677 9.86142 0.0010428 9 960 921,600 884,736,000 30.9839 9.86485 0.0010417 9 961 923,521 887,503,681 31.000 9.86827 0.0010406 9 962 925,444 890,277,128 31.0161 9.87169 0.0010395 9 963 927,369 893,056,347 31.0322 9.87511 0.0010384 9 964 929,296 895.841,344 31.0483 9.87853 0.0010373 9 965 931,225 898,632,125 31.0644 9.88195 0.0010363 9 966 933,156 901,428,696 31.0805 9.88536 0.0010363 9 967 935,089 904,231,063 31.0966 9.88877 0.0010341 9 968 937,024 907,039,232 31.1127 9.89217 0.0010331 9 969 938,961 909,853,209 31.1288 9.89558 0.0010309 9 970 940,900 912,673,000 31.1448 9.89898 0.0010309 9 971 942,841 915,498,611 31.1609 9.90238 0.0010309 9 972 944,784 918,330,048 31.1769 9.90278 0.0010309 9 973 944,784 918,330,048 31.1769 9.90278 0.0010309 9 974 948,676 924,010,424 31.2090 9.91257 0.0010267 9 975 950,625 926,859,375 31.2250 9.91596 0.0010256 9 977 954,529 932,574,833 31.2570 9.99274 0.0010235 9 978 955,8441 938,313,739 31.2890 9.92550 0.0010215 9 979 958,441 938,313,739 31.2890 9.92550 0.0010215 9
957 915,849 876,467,493 30.9354 9.85456 0.0010449 9.958 917,764 879,217,912 30.9516 9.85799 0.0010438 9.959 919,681 881.974,079 30.9677 9.86142 0.0010428 9.960 921,600 884,736,000 30.9839 9.86485 0.0010406 9.961 923,521 887,503,681 31.000 9.86827 0.0010406 9.962 925,444 890,277,128 31.0161 9.87169 0.0010395 9.963 927,369 893,056,347 31.0322 9.87511 0.0010384 9.964 929,296 895.841,344 31.0483 9.87853 0.0010373 9.965 931,225 888,632,125 31.0644 9.88195 0.0010363 9.966 933,156 901,428,696 31.0805 9.88536 0.0010373 9.965 933,056,364 904,231,063 31.0966 9.88877 0.0010341 9.967 935,089 904,231,063 31.0966 9.88877 0.0010341 9.968 937,024 907,039,232 31.1127 9.89217 0.0010331 9.969 9.938,961 909,853,209 31.1288 9.89558 0.0010320 9.970 940,900 912,673,000 31.1448 9.89898 0.0010309 9.971 942,841 915,498,611 31.1609 9.90238 0.0010309 9.971 942,841 915,498,611 31.1609 9.90238 0.0010309 9.972 944,784 918,330,048 31.1769 9.90578 0.0010288 9.973 946,729 921,167,317 31.1929 9.90918 0.0010277 9.974 948,676 924,010,424 31.2090 9.91257 0.0010267 9.975 950,625 926,859,375 31.2250 9.91596 0.0010256 9.976 952,576 924,010,424 31.2090 9.91257 0.0010266 9.977 954,529 932,574,833 31.2570 9.99274 0.0010235 9.978 956,484 935,441,352 31.2730 9.92612 0.0010225 9.978 9.958,441 938,313,739 31.2890 9.92550 0.0010215 9.979
958 917,764 879,217,912 30.9516 9.85799 0.0010438 9.959 919,681 881,974,079 30.9677 9.86142 0.0010428 9.960 921,600 884,736,000 30.9839 9.86485 0.0010417 99 961 923,521 887,503,681 31.000 9.86827 0.0010406 99 962 925,444 890,277,128 31.0161 9.87169 0.0010395 99 96 963 927,369 893,8056,347 31.0322 9.87511 0.0010384 99 96 937,1225 898,632,125 31.0483 9.87853 0.0010384 99 96 933,156 901,428,696 31.0805 9.88536 0.0010352 99 96 935,089 904,231,063 31.0966 9.88877 0.0010341 96 96 935,089 904,231,063 31.1288 9.8958 0.0010341 96 96 935,049 909,853,209 31.1288 9.8958 0.0010341 96 96 935,061 90,853,209 31.1288 9.8958 0.0010341 96 </td
959 919.681 881.974.079 30.9677 9.86142 0.0010428 9.960 921,600 884,736,000 30.9839 9.86485 0.0010417 99.961 923,521 887,503,681 31.0000 9.86827 0.0010406 99.963 925,444 890.277,128 31.0161 9.87169 0.0010395 99.964 929,296 893,056,347 31.0322 9.87511 0.0010384 99.964 929,296 895.841,344 31.0483 9.87853 0.0010373 99.965 931,225 898.632,125 31.0644 9.88195 0.0010363 99.966 933,156 901,428,696 31.0805 9.88536 0.0010363 99.966 933,156 901,428,696 31.0966 9.88877 0.0010341 99.968 937,024 907,039,232 31.1127 9.89217 0.0010331 99.969 938,961 909,853,209 31.1288 9.89558 0.0010320 99.969 938,961 909,853,209 31.1288 9.89558 0.0010320 99.970 940,900 912,673,000 31.1448 9.89898 0.0010320 99.971 942,841 915,498,611 31.1609 9.90238 0.0010299 99.971 944,784 918,330,048 31.1769 9.90238 0.0010299 99.972 944,784 918,330,048 31.1769 9.90578 0.0010288 99.973 946,729 921,167,317 31.1929 9.90578 0.0010288 99.974 948,676 924,010,424 31.2090 9.91257 0.0010267 99.975 950,625 926,859,375 31.2250 9.91596 0.0010256 99.976 952,576 924,010,424 31.2410 9.91935 0.0010246 99.978 954,529 932,574,833 31.2250 9.91596 0.0010225 99.978 956,484 935,441,352 31.2730 9.92274 0.0010235 99.978 956,484 935,441,352 31.2730 9.92612 0.0010225 99.979 958,441 938,313,739 31.2890 9.92950 0.0010215 99.979
960 921,600 884,736,000 30.9839 9.86485 0.0010417 99 961 923,521 887,503,681 31.000 9.86827 0.0010406 99 962 925,444 890,277,128 31.0161 9.87169 0.0010395 99 963 927,369 893,056,347 31.0322 9.87511 0.0010384 99 964 929,296 895,841,344 31.0483 9.87853 0.0010373 99 965 931,225 898,632,125 31.0644 9.88195 0.0010363 99 966 933,156 901,428,696 31.0805 9.88536 0.0010363 99 967 935,089 904,231,063 31.0966 9.88877 0.0010341 99 968 937,024 907,039,232 31.1127 9.89217 0.0010331 99 969 938,961 909,853,209 31.1288 9.89558 0.0010320 99 970 940,900 912,673,000 31.1448 9.89898 0.0010309 99 971 942,841 915,498,611 31.1609 9.90238 0.0010309 99 972 944,784 918,330,048 31.1769 9.90578 0.0010298 99 973 944,784 918,330,048 31.1769 9.90578 0.0010288 99 974 948,676 924,010,424 31.2090 9.91257 0.0010267 99 975 950,625 926,859,375 31.2250 9.91596 0.0010256 99 976 952,576 929,714,176 31.2410 9.91935 0.0010235 99 978 956,484 935,441,352 31.2730 9.92612 0.0010235 99 979 958,441 938,313,739 31.2890 9.92950 0.0010215 99
961 923,521 887,503,681 31.000 9.86827 0.0010406 9962 925,444 890,277,128 31.0161 9.87169 0.0010395 9963 927,369 893,056,347 31.0322 9.87511 0.0010384 9964 929,296 895.841,344 31.0483 9.87853 0.0010373 9965 931,225 888,632,125 31.0644 9.88195 0.0010363 9966 933,156 901,428,696 31.0805 9.88536 0.0010352 9967 935,089 904,231,063 31.0966 9.88877 0.0010341 9968 937,024 907,039,232 31.1127 9.89217 0.0010331 9969 938,961 999,853,209 31.1288 9.89558 0.0010329 9970 940,900 912,673,000 31.1448 9.89898 0.0010309 9971 942,841 915,498,611 31.1609 9.90238 0.0010309 9971 942,841 915,498,611 31.1609 9.90238 0.0010309 9972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90918 0.0010277 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9975 950,625 926,859,375 31.2250 9.91596 0.0010266 9976 952,576 929,714,176 31.2410 9.91935 0.0010266 9978 955,441 938,313,739 31.2890 9.92550 0.0010215 9978
962 925,444 890,277,128 31.0161 9.87169 0.0010395 9963 927,369 893,056,347 31.0322 9.87511 0.0010384 9964 929,296 895.841,344 31.0483 9.87853 0.0010373 9965 931,225 898,632,125 31.0644 9.88195 0.0010363 9966 933,156 901,428,696 31.0805 9.88536 0.0010352 9967 935,089 904,231,063 31.0966 9.88877 0.0010341 9969 938,961 909,853,209 31.1288 9.89538 0.0010341 9969 938,961 909,853,209 31.1288 9.89558 0.0010320 9970 940,900 912,673,000 31.1448 9.89898 0.0010320 9970 940,900 912,673,000 31.1448 9.89898 0.0010320 9971 942,841 915,498,611 31.1609 9.90238 0.0010299 9971 942,841 915,498,611 31.1609 9.90238 0.0010299 9972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90918 0.0010277 977 948,576 924,010,424 31.2090 9.91257 0.0010267 9975 950,625 926,859,375 31.2250 9.91596 0.0010256 9970 953,576 929,714,176 31.2410 9.91935 0.0010246 9979 954,529 932,574,833 31.2570 9.9274 0.0010235 9978 978 956,484 935,441,352 31.2730 9.92612 0.0010225 9979 958,441 938,313,739 31.2890 9.92950 0.0010215 9979
963 927,369 893,056,347 31.0322 9.87511 0.0010384 9964 929,296 895.841,344 31.0483 9.87853 0.0010373 9965 931,225 898,632,122 31.0644 9.88195 0.0010373 9966 933,156 901,428,696 31.0805 9.88536 0.0010352 9967 935,089 904,231,063 31.0966 9.88877 0.0010331 9969 938,961 909,853,209 31.1127 9.89217 0.0010331 9969 938,961 909,853,209 31.1288 9.89558 0.0010320 9969 970 940,900 912,673,000 31.1448 9.89898 0.0010320 9971 942,841 915,498,611 31.1609 9.90238 0.0010329 9971 942,841 915,498,611 31.1609 9.90238 0.0010329 9972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 911,167,317 31.1929 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90918 0.0010277 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9975 950,625 926,859,375 31.2250 9.91596 0.0010266 9977 954,529 932,574,833 31.2410 9.91935 0.0010246 9977 954,529 932,574,833 31.2570 9.92274 0.0010235 9978 956,484 935,441,352 31.2730 9.92612 0.0010225 9979 958,441 938,313,739 31.2890 9.92950 0.0010215 9979
964 929,296 895.841,344 31.0483 9.87853 0.0010373 9965 931,225 898.632,125 31.0644 9.88195 0.0010363 9966 933,156 901,428,696 31.0805 9.88536 0.0010352 9967 935,089 904,231,063 31.0966 9.88877 0.0010341 9968 937,024 907,039,232 31.1127 9.89217 0.0010331 9969 938,961 909,853,209 31.1288 9.89558 0.0010320 9970 940,900 912,673,000 31.1448 9.89898 0.0010320 9971 942,841 915,498,611 31.1609 9.90238 0.0010299 9971 944,784 918,330,048 31.1769 9.90238 0.0010299 9972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90518 0.0010277 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9975 950,625 926,859,375 31.2250 9.91596 0.0010256 9976 952,576 929,714,176 31.2410 9.91935 0.0010246 9977 954,529 932,574,833 31.2570 9.92374 0.0010235 9978 956,484 935,441,352 31.2730 9.92612 0.0010225 9979 958,441 938,313,739 31.2890 9.92950 0.0010215 9979
965 931,225 898,632,125 31.0644 9.88195 0.0010363 9966 933,156 901,428,696 31.0805 9.88536 0.0010352 9967 935,089 904,231,063 31.0966 9.88877 0.0010341 9968 937,024 907,039,232 31.1127 9.89217 0.0010331 9969 938,961 909,853,209 31.1288 9.89558 0.0010320 9970 940,900 912,673,000 31.1448 9.89898 0.0010309 9971 942,841 915,498,611 31.1609 9.90238 0.0010309 9971 944,784 918,330,048 31.1769 9.90238 0.0010299 9972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90578 0.0010268 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9975 950,625 926,859,375 31.2250 9.91596 0.0010256 9976 952,576 929,714,176 31.2410 9.91935 0.0010246 9979 954,529 932,574,833 31.2570 9.9274 0.0010235 9978 956,484 935,441,352 31.2730 9.92612 0.0010225 9978 958,441 938,313,739 31.2890 9.92950 0.0010215 9979
966 933,156 901,428,696 31.0805 9.88536 0.0010352 9967 935,089 904,231,063 31.0966 9.88877 0.0010341 996968 937,024 907,039,232 31.1127 9.89217 0.0010331 9969 938,961 909,853,209 31.1288 9.89558 0.0010320 96970 940,900 912,673,000 31.1448 9.89898 0.0010309 9971 942,841 915,498,611 31.1609 9.90238 0.0010309 9971 942,841 915,498,611 31.1609 9.90238 0.0010299 9972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90518 0.0010277 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9975 950,625 926,859,375 31.2250 9.91596 0.0010256 9979 954,529 932,574,833 31.2570 9.91935 0.0010246 9977 954,529 932,574,833 31.2570 9.9274 0.0010235 9978 956,484 935,441,352 31.2730 9.92612 0.0010225 9979 958,441 938,313,739 31.2890 9.92950 0.0010215 9979
967 935,089 904,231,063 31.0966 9.88877 0.0010341 99 968 937,024 907,039,232 31.1127 9.89217 0.0010331 99 969 938,961 909,853,209 31.1288 9.89558 0.0010320 99 970 940,900 912,673,000 31.1448 9.89898 0.0010320 99 971 942,841 915,498,611 31.1609 9.90238 0.0010299 99 972 944,784 918,330,048 31.1769 9.90578 0.0010288 99 973 946,729 921,167,317 31.1929 9.90918 0.0010277 99 974 948,676 924,010,424 31.2090 9.91257 0.0010267 99 975 950,625 926,859,375 31.2250 9.91596 0.0010267 99 976 952,576 929,714,176 31.2410 9.91935 0.0010246 99 977 954,529 932,574,833 31.2570 9.92274 0.0010235 99 978 956,484 935,441,352 31.2730 9.92612 0.0010225 99 979 958,441 938,313,739 31.2890 9.92950 0.0010215 99
967 935,089 904,231,063 31.0966 9.88877 0.0010341 90 968 937,024 907,039,232 31.1127 9.89217 0.0010331 90 969 938,961 909,853,209 31.1288 9.89538 0.0010320 90 970 940,900 912,673,000 31.1448 9.89898 0.0010320 90 971 942,841 915,498,611 31.1609 9.90238 0.0010299 90 972 944,784 918,330,048 31.1769 9.90578 0.0010288 90 973 946,729 921,167,317 31.1929 9.90918 0.0010277 90 974 948,676 924,010,424 31.2090 9.91257 0.0010267 90 975 950,625 926,859,375 31.2250 9.91596 0.0010267 90 976 952,576 929,714,176 31.2410 9.91935 0.0010246 90 977 954,529 932,574,833 31.2570 9.92274 0.0010235 90 978 956,484 935,441,352 31.2730 9.92612 0.0010225 90 979 958,441 938,313,739 31.2890 9.92950 0.0010215 90
968 937,024 907,039,232 31.1127 9.89217 0.0010331 969 938,961 909,853,209 31.1288 9.89558 0.0010320 969 970 940,900 912,673,000 31.1448 9.89898 0.0010320 9971 942,841 915,498,611 31.1609 9.90238 0.0010299 9972 944,784 918,330,048 31.1769 9.90238 0.0010299 9972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90918 0.0010277 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9979 950,625 926,859,375 31.2250 9.91596 0.0010267 9979 952,576 929,714,176 31.2410 9.91935 0.0010246 9979 955,4529 932,574,833 31.2570 9.92274 0.0010235 9979 956,484 935,441,352 31.2730 9.92612 0.0010225 9979 958,441 938,313,739 31.2890 9.92950 0.0010215 9979
970 940,900 912,673,000 31.1448 9.8988 0.0010309 971 942,841 915,498,611 31.1609 9.90238 0.0010299 972 944,784 918,330,048 31.1769 9.90578 0.0010288 973 946,729 921,167,317 31.1929 9.90578 0.0010277 974 948,676 924,010,424 31.2090 9.91257 0.0010267 975 950,625 926,859,375 31.2250 9.91596 0.0010256 977 954,529 932,574,833 31.2250 9.91596 0.0010256 977 954,529 932,574,833 31.2570 9.91935 0.0010246 977 954,529 932,574,833 31.2570 9.9274 0.0010235 978 978 956,484 935,441,352 31.2730 9.92612 0.0010225 978 979 958,441 938,313,739 31.2890 9.92950 0.0010215 978
971 942,841 915,498,611 31.1609 9.90238 0.0010299 99 972 944,784 918,330,048 31.1769 9.90578 0.0010288 99 973 946,729 921,167,317 31.1929 9.90918 0.0010277 99 974 948,676 924,010,424 31.2090 9.91257 0.0010267 99 975 950,625 926,859,375 31.2250 9.91596 0.0010256 99 976 952,576 929,714,176 31.2410 9.91935 0.0010246 99 977 954,529 932,574,833 31.2570 9.92274 0.0010235 99 978 956,484 935,441,352 31.2730 9.92612 0.0010225 99 979 958,441 938,313,739 31.2890 9.92950 0.0010215 99
972 944,784 918,330,048 31.1769 9.90578 0.0010288 9973 946,729 921,167,317 31.1929 9.90918 0.0010277 9974 948,676 924,010,424 31.2090 9.91257 0.0010267 9975 950,625 926,859,375 31.2250 9.91596 0.0010256 9976 952,576 929,714,176 31.2410 9.91935 0.0010246 9977 954,529 932,574,833 31.2570 9.92274 0.0010235 9978 956,484 935,441,352 31.2730 9.92612 0.0010225 9979 958,441 938,313,739 31.2890 9.92950 0.0010215 9979
973 946,729 921,167,317 31.1929 9.90918 0.0010277 93.974 948,676 924,010,424 31.2090 9.91257 0.0010267 93.975 950,625 926,859,375 31.2250 9.91596 0.0010256 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010246 93.975 93.91596 0.0010225 93.975 93.91596 0.0010225 93.975 93.91596 0.0010225 93.975 93.91596 0.0010225 93.975 93.91596 0.0010225 93.975 93.91596 0.0010225 93.975 93.91596 0.0010225 93.975 <
974 948,676 924,010,424 31.2090 9.91257 0.0010267 95 975 950,625 926,859,375 31.2250 9.91596 0.0010256 95 976 952,576 929,714,176 31.2410 9.91935 0.0010246 95 977 954,529 932,574,833 31.2570 9.92274 0.0010235 95 978 956,484 935,441,352 31.2730 9.92612 0.0010225 95 979 958,441 938,313,739 31.2890 9.92950 0.0010215 95
974 948,676 924,010,424 31.2090 9.91257 0.0010267 95 975 950,625 926,859,375 31.2250 9.91596 0.0010256 95 976 952,576 929,714,176 31.2410 9.91935 0.0010246 95 977 954,529 932,574,833 31.2570 9.92274 0.0010235 95 978 956,484 935,441,352 31.2730 9.92612 0.0010225 95 979 958,441 938,313,739 31.2890 9.92950 0.0010215 95
976 952,576 929,714,176 31.2410 9.91935 0.0010246 99.77 977 954,529 932,574,833 31.2570 9.92274 0.0010235 99.78 978 956,484 935,441,352 31.2730 9.92612 0.0010225 99.79 979 958,441 938,313,739 31.2890 9.92950 0.0010215 99.79
977 954,529 932,574,833 31.2570 9.92274 0.0010235 9.978 978 956,484 935,441,352 31.2730 9.92612 0.0010225 9.979 979 958,441 938,313,739 31.2890 9.92950 0.0010215 9.92950
978 956,484 935,441,352 31.2730 9.92612 0.0010225 97 979 958,441 938,313,739 31.2890 9.92950 0.0010215 97
979 958,441 938,313,739 31.2890 9.92950 0.0010215 9
980 960,400 941,192,000 31.3050 9.93288 0.0010204 98
981 962,361 944,076,141 31.3209 9.93626 0.0010194 98
982 964,324 946,966,168 31.3369 9.93964 0.0010183 98
983 966,289 949,862,087 31.3528 9.94301 0.0010173 98
984 968,256 952,763,904 31.3688 9.94638 0.0010163 98
985 970,225 955,671,625 31.3847 9.94975 0.0010152 98
986 972,196 958,585,256 31.4006 9.95311 0.0010142 98
987 $974,169$ $961,504,803$ 31.4166 9.95648 0.0010132 987
988 976,144 964,430,272 31.4325 9.95984 0.0010121 98
989 978,121 967,361,669 31.4484 9.96320 0.0010111 98
990 980,100 970,299,000 31.4643 9.96655 0.0010101 99
991 982,081 973,242,271 31.4802 9.96991 0.0010091 99
992 984,064 976,191,488 31.4960 9.97326 0.0010081 99
993 986,049 979,146,657 31.5119 9.97661 0.0010070 99
994 988,036 982,107,784 31.5278 9.97996 0.0010060 99
995 990,025 • 985,074,875 31.5436 9.98331 0.0010050 99
996 992,016 988,047,936 31.5595 9.98665 0.0010040 99
997 994,009 991,026,973 31.5753 9.98999 0.0010030 99
998 996,004 994,011,992 31.5911 9.99333 0.0010020 99
999 998,∞1 997,∞2,999 31.6070 9.99667 0.∞1∞10 99
1000 1,000,000 1,000,000,000 31.6228 10.00000 0.0010000 100

Powers, Roots and Reciprocals

,,		0.1	0 0	10 1 D	D : .	· · ·
No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1001	1,002,001	1,003,003,001	31.6386	10.∞33	0.0009990	1001
1002	1,004,004	1,006,012,008	31.6544	10.0067	0.0009980	1002
1003	1,006,009	1,009,027,027	31.6702	10.0100	0.0009970	1003
1004	1,008,016	1,012,048,064	31.686 0	10.0133	o.ooogg6o	1004
1005	1,010,025	1,015,075,125	31.7017	10.0166	0.0009950	1005
1006	1,012,036	1,018,108,216	31.7175	10.0200	0.0009940	1006
1007	1,014,049	1,021,147,343	31.7333	10.0233	0.0009930	1007
1008	1,016,064	1,024,192,512	31.7490	10.0266	0.0009921	1008
1009	1,018,081	1,027,243,729	31.7643	10.0299	0.0009911	1009
1010	1,020,100	1,030,301,000	31.7805	10.0332	0.0009901	1010
1011	1,022,121	1,033,364,331	31.7962	10.0365	0.0009891	1011
1012	1,024,144	1,036,433,728	31.8119	10.0398	0.0009881	1012
1013	1,026,169	1,039,509,197	31.8277	10.0431	0.0009872	1013
1014	1,028,196	1,042,590,744	31.8434	10.0465	0.0009862	1014
1015	1,030,225	1,045,678,375	31.8591	10.0498	0.0009852	1015
1016	1,032,256	1,048,772,096	31.8748	10.0531	0.0009843	1016
1017	1,034,289	1,051,871,913	31.8904	10.0563	0.0009833	1017
1018	1,036,324	1,054,977,832	31.9061	10.0596	0.0009823	1018
1019	1,038,361	1,058,089,859	31.9218	10.0629	0.0009814	1019
1020	1,040,400	1,061,208,000	31.9374	10.0662	0.0009804	1020
1021	1,042,441	1,064,332,261	31.9531	10.0695	0.0009794	1021
1022	1,044,484	1,067,462,648	31.9687	10.0728	0.0009785	1022
1023	1,046,529	1,070,599,167	31.9844	10.0761	0.0009775	1023
1024	1,048,576	1,073,741,824	32.0000	10.0794	0.0009766	1024
1025	1,050,625	1,076,890,625	32.0156	10.0826	0.0009756	1025
1026	1,052,676	1,080,045,576	32.0312	10.0859	0.0009747	1026
1027	1,054,729	1,083,206,683	32.0468	10.0892	0.0009737	1027
1028	1,056,784	1,086,373,952	32.0624	10.0925	0.0009728	1028
1029	1,058,841	1,089,547,389	32.0780	10.0957	0.0009718	1029
1030	1,060,900	1,092,727,000	32.0936	10.0990	0.0009709	1030
1031	1,062,961	1,095,912,791	32.1092	10. 1023	0.0009699	1031
1032	1,065,024	1,099,104,768	32.1248	10.1055	0.0009690	1032
1033	1,067,089	1,102,302,937	32.1403	10.1088	0.0009681	1033
1034	1,069,156	1,105,507,304	32.1559	10.1121	0.0009671	1034
1035	1,071,225	1,108,717,875	32.1714	10.1153	0.0009662	1035
1036	1,073,296	1,111,934,656	32.1870	10.1186	0.0009653	1036
1037	1,075,369	1,115,157,653	32.2025	10.1218	0.0009643	1037
1038	1,077,444	1,118,386,872	32.2180	10.1210	0.0009634	1038
1039	1,079,521	1,121,622,319	32.2335	10.1283	0.0009625	1039
1040	1,081,600	1,124,864,000	32.2490	10.1316	0.0009615	1040
1041	1,083,681	1,128,111,921	32.2645	10.1310	0.0009606	1041
1042	1,085,764	1,131,366,088	32.2800	10.1340	0.0009597	1042
1043	1,087,849	1,134,626,507	32.2955	10.1301	0.0009588	1043
1044	1,089,936	1,137,893,184	32.3110	10.1446	0.0009579	1044
1045	1,009,930	1,141,166,125	32.3265	10.1478	* 0.0009569	1045
1046	1,092,023	1,144,445,336	32.3419	10.1510	0.0009560	1046
1047	1,096,209	1,147,730,823	32.3574	10.1510	0.0009551	1047
1048	1,098,304	1,151,022,592	32.3728	10.1545	0.0009542	1047
1049	1,100,401	1,154,320,649	32.3728	10.15/5	0.0009533	1049
1050	1,100,401	1,157,625,000	32.4037	10.1640	0.0009524	1050
1030	1,102,300	1,137,023,000	32.4037	10.1040	5.0009324	1030

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1051	1,104,601	1,160,935,651	32.4191	10.1672	0.0009515	1051
1052	1,106,704	1,164,252,608	32.4345	10.1704	0.0009506	1052
1053	1,108,809	1,167,575,877	32.4500	10.1736	0.0009497	1053
1054	1,110,916	1,170,905,464	32.4654	10.1769	0.0009488	1054
1055	1,113,025	1,174,241,375	32.4808	10.1801	0.0009479	1055
1056	1,115,136	1,177,583,616	32.4962	10. 1833	0.0009470	1056
1057	1,117,249	1,180,932,193	32.5115	10.1865	0.0009461	1057
1058	1,119,364	1,184,287,112	32.5269	10. 1897	0.0009452	1058
1059	1,121,481	1,187,648,379	32.5423	10.1929	0.0009443	1059
1060	1,123,600	1,191,016,000	32.5576	10.1961	0.0009434	1060
1061	1,125,721	1,194,389,981	32.5730	10.1993	0.0009425	1061
1062	1,127,844	1,197,770,328	32.5883	10.2025	0.0009416	1062
1063	1,129,969	1,201,157,047	32.6037	10.2057	0.0009407	1063
1064	1,132,096	1,204,550,144	32.6190	10.2089	0.0009398	1064
1065	1,134,225	1,207,949,625	32.6343	10.2121	0.0009390	1065
1066	1,136,356	1,211,355,496	32.6497	10.2153	0.0009381	1066
1067	1,138,489	1,214,767,763	32.6650	10.2185	0.0009372	1067
1068	1,140,624	1,218,186,432	32.6803	10.2217	o.000 9363	1068
1069	1,142,761	1,221,611,509	32.6956	10.2249	0.0009355	1 0 69
1070	1,144,900	1,225,043,000	32.7109	10.2281	0.0009346	1070
1071	1,147,041	1,228,480,911	32.7261	10.2313	0.0009337	1071
1072	1,149,184	1,231,925,248	32.7414	10.2345	0.0009328	1072
1073	1,151,329	1,235,376,017	32.7567	10.2376	0.0009320	1073
1074	1,153,476	1,238,833,224	32.7719	10.2408	0.0009311	1074
1075	1,155,625	1,242,296,875	32.7872	10.2440	0.0009302	1075
1076	1,157,776	1,245,766,976	32.8024	10.2472	0.0009294	1076
1077	1,159,929	1,249,243,533	32.8177	10.2503	0.0009285	1077
1078	1,162,084	1,252,726,552	32.8329	10.2535	0.0009276	1078
1079	1,164,241	1,256,216,039	32.8481	10.2567	0.0009268	1079
1080	1,166,400	1,259,712,000	32.8634	10.2599	0.0009259	1080
1081	1,168,561	1,263,214,441	32.8786	10.2630	0.0009251	1081
1082	1,170,724	1,266,723,368	32.8938	10. 2662	0.0009242	1082
1083	1,172,889	1,270,238,787	32.9090	10. 2693	0.0009234	1083
1084	1,175,056	1,273,760,704	32.9242	10.2725	0.0009225	1084
1085	1,177,225	1,277,289,125	32.9393	10.2757	0.0009217	1085
1086	1,179,396	1,280,824,056	32.9545	10.2788	0.0009208	1086
1087	1,181,569	1,284,365,503	32.9697	10.2820	0.0009200	1087
1088	1,183,744	1,287,913,472	32.9848	10.2851	0.0009191	1088
1089	1,185,921	1,291,467,969	33.0000	10.2883	0.0009183	1089
1090	1,188,100	1,295,029,000	33.0151	10.2914	0.0009174	1090
1091	1,190,281	1,298,596,571	33.0303	10.2946	0.0009166	1091
1092	1,192,464	1,302,170,688	33.0454	10.2977	0.0009158	1092
1093	1,194,649	1,305,751,357	33.0606	10.3009	0.0009149	1093
1094	1,196,836	1,309,338,584	33.0757	10.3040	0.0009141	1 .
1095	1,199,025	1,312,932,375	33.0908	10.3071	0.0009132	1095
1096	1,201,216	1,316,532,736	33.1059	10.3103	0.0009124	1090
1097	1,203,409	1,320,139,673	33.1210	10.3134	0.0009110	1097
1098	1,205,604	1,323,753,192	33.1361	10.3165	0.0009107	1098
1099	1,207,801	1,327,373,299	33.1512 33.1662	10.3197	0.0009091	1100
1100	1,210,000	1,331,000,000	33.1002	10.3220	0.0009091	1100

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1101	1,212,201	1,334,633,301	33.1813	10.3259	0.0009083	IIOI
1102	1,214,404	1,338,273,208	33.1964	10.3291	0.0009074	1102
1103	1,216,609	1,341,919,727	33.2114	10.3322	0.0009066	1103
1104	1,218,816	1,345,572,864	33.2265	10.3353	0.0009058	1104
1105	1,221,025	1,349,232,625	33.2415	10.3384	0.0009050	1105
1106	1,223,236	1,352,899,016	33.2566	10.3415	0.0009042	1106
1107	1,225,449	1,356,572,043	33.2716	10.3447	0.0009033	1107
1108	1,227,664	1,360,251,712	33.2866	10.3478	0.0009025	1108
1109	1,229,881	1,363,938,029	33.3017	10.3509	0.0009017	1109
1110	1,232,100	1,367,631,000	33.3167	10.3540	0.0009009	1110
1111	1,234,321	1,371,330,631	33.3317	10.3571	0.0009001	1111
1112	1,236,544	1,375,036,928	33.3467	10.3602	0.0008993	1112
1113	1,238,769	1,378,749,897	33.3617	10.3633	0.0008985	1113
1114	1,240,996	1,382,469,544	33.3766	10.3664	0.0008977	1114
1115	1,243,225	1,386,195,875	33.3916	10.3695	o.0 008969	1115
1116	1,245,456	1,389,928,896	33.4066	10.3726	0.0008961	1116
1117	1,247,689	1,393,668,613	33.4215	10.3757	0.0008953	1117
1118	1,249,924	1,397,415,032	33.4365	10.3788	0.0008945	1118
1119	1,252,161	1,401,168,159	33-4515	10.3819	0.0008937	1119
1120	1,254,400	1,404,928,000	33.4664	10.3850	0.0008929	1120
1121	1,256,641	1,408,694,561	33.4813	10.3881	0.0008921	1121
1122	1,258,884	1,412,467,848	33.4963	10.3912	0.0008913	1122
1123	1,261,129	1,416,247,867	33.5112	10.3943	0.0008905	1123
1124	1,263,376	1,420,034,624	33.5261	10.3973	0.0008897	1124
1125	1,265,625	1,423,828,125	33.5410	10.4004	0.0008889	1125
1126	1,267,876	1,427,628,376	33.5559	10.4035	0.0008881	1126
1127	1,270,129	1,431,435,383	33.5708	10.4066	0.0008873	1127
1128	1,272,384	1,435,249,152	33.5857	10.4097	0.0008865	1128
1129	1,274,641	1,439,069,689	33.6006	10.4127	0.0008857	1129
1130	1,276,900	1,442,897,000	33.6155	10.4158	0.0008850	1130
1131	1,279,161	1,446,731,091	33.6303	10.4189	0.0008842	1131
1132	1,281,424	1,450,571,968	33.6452	10.4219	0.0008834	1132
1133	1,283,689	1,454,419,637	33.66or	10.4250	0.0008826	1133
1134	1,285,956	1,458,274,104	33.6749	10.4281	0.0008818	1134
1135	1,288,225	1,462,135,375	33.6898	10.4311	0.0008811	1135
1136	1,290,496	1,466,003,456	33.7046	10.4342	0.0008803	1136
1137	1,292,769	1,469,878,353	33.7194	10.4373	0.0008795	1137
1138	1,295,044	1,473,760,072	33.7342	10.4403	0.0008787	1138
1139	1,297,321	1,477,648,619	33.7491	10.4434	0.∞∞8780	1139
1140	1,299,600	1,481,544,000	33.7639	10.4464	0.0008772	1140
1141	1,301,881	1,485,446,221	33.7787	10.4495	0.0008764	1141
1142	1,304,164	1,489,355,288	33.7935	10.4525	0.0008757	1142
1143	1,306,449	1,493,271,207	33.8083	10.4556	0.0008749	1143
1144	1,308,736	1,497,193,984	33.8231	10.4586	0.0008741	1144
1145	1,311,025	1,501,123,625	33.8378	10.4617	0.0008734	1145
1146	1,313,316	1,505,060,136	33.8526	10.4647	0.0008726	1146
1147	1,315,609	1,509,003,523	33.8674	10.4678	0.0008718	1147
1148	1,317,904	1,512,953,792	33.8821	10.4708	0.0008711	1148
1149	1,320,201	1,516,910,949	33.8969	10.4739	0.0008703	1149
1150	1,322,500	1,520,875,000	33.9116	10.4769	o.∞∞8696	1150
				·		

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1151	1,324,801	1,524,845,951	33.9264	10.4799	0.0008688	1151
1152	1,327,104	1,528,823,808	33.9411	10.4830	0.0008681	1152
1153	1,329,409	1,532,808,577	33.9559	10.4860	0.0008673	1153
1154	1,331,716	1,536,800,264	33.9706	10.4890	0.0008666	1154
1155	1,334,025	1,540,798,875	33.9853	10.4921	0.∞∞8658	1155
1156	1,336,336	1,544,804,416	34.0000	10.4951	0.0008651	1156
1157	1,338,649	1,548,816,893	34.0147	10.4981	0.0008643	1157
1158	1,340,964	1,552,836,312	34.0294	10.5011	0.0008636	1158
1159	1,343,281	1,556,862,679	34.0441	10.5042	0.0008628	1159
1160	1,345,600	1,560,896,∞∞	34.0588	10.5072	0.0008621	1160
1161	1,347,921	1,564,936,281	34.0735	10.5102	0.0008613	1161
1162	1,350,244	1,568,983,528	34.0881	10.5132	0.0008606	1162
1163	1,352,569	1,573,037,747	34.1028	10.5162	0.0008598	1163
1164	1,354,896	1,577,098,944	34.1174	10.5192	0.0008591	1164
1165	1,357,225	1,581,167,125	34.1321	10.5223	0.0008584	1165
1166	1,359,556	1,585,242,296	34.1467	10.5253	0.0008576	1166
1167	1,361,889	1,589,324,463	34.1614	10.5283	0.0008569	1167
1168	1,364,224	1,593,413,632	34.1760	10.5313	0.0008562	1168
1169	1,366,561	1,597,509,809	34.1906	10.5343	0.0008554	1169
1170	1,368,900	1,601,613,000	34.2053	10.5373	0.0008547	1170
1171	1,371,241	1,605,723,211	34.2199	10.5403	0.0008540	1171
1172	1,373,584	1,609,840,448	34.2345	10.5433	0.0008532	1172
1173	1,375,929	1,613,964,717	34.2491	10.5463	0.0008525	1173
1174	1,378,276	1,618,096,024	34.2637	10.5493	0.0008518	1174
1175	1,380,625	1,622,234,375	34.2783	10.5523	0.0008511	1175
1176	1,382,976	1,626,379,776	34.2929	10.5553	0.0008503	1176
1177	1,385,329	1,630,532,233	34.3074	10.5583	0.0008496	1177
1178	1,387,684	1,634,691,752	34.3220	10.5612	0.0008489	1178
1179	1,390,041	1,638,858,339	34.3366	10.5642	0.0008482	1179
1180	1,392,400	1,643,032,000	34.3511	10.5672	0.0008475	1180
1181	1,394,761	1,647,212,741	34.3657	10.5702	0.0008467	1181
1182	1,397,124	1,651,400,568	34.3802	10.5732	0.0008460	1182
1183	1,399,489	1,655,595,487	34.3948	10.5762	0.0008453	1183
1184	1,401,856	1,659,797,504	34.4093	10.5791	0.0008446	1184
1185	1,404,225	1,664,006,625	34.4238	10.5821	0.0008439	1185
1186	1,406,596	1,668,222,856	34.4384	10.5851	0.0008432	1186
1187	1,408,969	1,672,446,203	34.4529	10.5881	0.0008425	1187
1188	1,411,344	1,676,676,672	34.4674	10.5910	0.0008418	1188
1189	1,413,721	1,680,914,269	34.4819	10.5940	0.0008410	1189
1190	1,416,100	1,685,159,000	34.4964	10.5970	0.0008403	1190
1191	1,418,481	1,689,410,871	34.5109	10.6000	0.0008396	1191
1192	1,420,864	1,693,669,888	34.5254	10.6029	0.0008389	1192
1193	1,423,249	1,697,936,057	34.5398	10.6059	0.0008382	1193
1194	1,425,636	1,702,209,384	34.5543	10.6088	0.0008375	1194
1195	1,428,025	1,706,489,875	34.5688	10.6118	0.0008368	1195
1196	1,430,416	1,710,777,536	34.5832	10.6148	0.0008361	1196
1197	1,432,809	1,715,072,373	34.5977	10.6177	0.0008354	1197
1198	1,435,204	1,719,374,392	34.6121 34.6266	10.6236	0.0008347	1198
1199	1,437,601	1,723,683,599	34.6200	10.6236	0.0008333	1199
1200	1,440,000	1,/20,000,000	34.0410	10.0200	0.000333	1200

Powers, Roots and Reciprocals

		I				
No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1201	1,442,401	1,732,323,601	34.6554	10.6295	0.0008326	1201
1202	1,444,804	1,736,654,408	34.6699	10.6325	0.0008319	1202
1203	1,447,209	1,740,992,427	34.6843	10.6354	0.0008313	1203
1204	1,449,616	1,745,337,664	34.6987	10.6384	0.000 83 0 6	1204
1 205	1,452,025	1,749,690,125	34.7131	10.6413	0.0008299	1205
1206	1,454,436	1,754,049,816	34.7275	10.6443	0.0008292	1206
1207	1,456,849	1,758,416,743	34.7419	10.6472	0.0008285	1207
1208	1,459,264	1,762,790,912	34.7563	10.6501	0.0008278	1208
1209	1,461,681	1,767,172,329	34.7707	10.6531	0.0008271	1209
1210	1,464,100	1,771,561,000	34.7851	10.6560	0.0008264	1210
1211	1,466,521	1,775,956,931	34.7994	10.6590	0.0008258	1211
1212	1,468,944	1,780,360,128	34.8138	10.6619	0.0008251	1212
1213	1,471,369	1,784,770,597	34.8281	10.6648	0.0008244	1213
1214	1,473,796	1,789,188,344	34.8425	10.6678	0.0008237	1214
1215	1,476,225	1,793,613,375	34.8569	10.6707	0.0008230	1215
1216	1,478,656	1,798,045,696	34.8712	10.6736	0.0008224	1216
1217	1,481,089	1,802,485,313	34.8855	10.6765	0.0008217	1217
1218	1,483,524	1,806,932,232	34.8999	10.6795	0.0008210	1218
1219	1,485,961	1,811,386,459	34.9142	10.6824	0.0008203	1219
1220	1,488,400	1,815,848,000	34.9285	10.6853	0.0008197	1220
1221	1,490,841	1,820,316,861	34.9428	10.6882	0.0008190	1221
1222	1,493,284	1,824,793,048	34.9571	10.6911	0.0008183	1222
1223	1,495,729	1,829,276,567	34.9714	10.6940	0.0008177	1223
1224	1,498,176	1,833,767,424	34.9857	10.6970	0.0008170	1224
1225	1,500,625	1,838,265,625	35.0000	10.6999	0.0008163	1225
1226	1,503,076	1,842,771,176	35.0143	10.7028	0.0008157	1226
1227	1,505,529	1,847,284,083	35.0286	10.7057	0.0008150	1227
1228	1,507,984	1,851,804,352	35.0428	10.7086	0.0008143	1228
1229	1,510,441	1,856,331,989	35.0571	10.7115	0.0008137	1229
1230	1,512,900	1,860,867,000	35.0714	10.7144	0.0008130	1230
1231	1,515,361	1,865,409,391	35. 0 856	10.7173	0.0008123	1231
1232	1,517,824	1,869,959,168	35. 0 999	10.7202	0.0008117	1232
1233	1,520,289	1,874,516,337	35.1141	10.7231	0.0008110	1233
1234	1,522,756	1,879,080,904	35.1283	10.7260	0.0008104	1234
1235	1,525,225	1,883,652,875	35.1426	10.7289	0.0008097	1235
1236	1,527,696	1,888,232,256	35.1568	10.7318	0.0008091	1236
1237	1,530,169	1,892,819,053	35.1710	10.7347	0.0008084	1237
1238	1,532,644	1,897,413,272	35.1852	10.7376	0.0008078	1238
1239	1,535,121	1,902,014,919	35.1994	10.7405	0.0008071	1239
1240	1,537,6∞	1,906,624,000	35.2136	10.7434	0.0008065	1240
1241	1,540,081	1,911,240,521	35.2278	10.7463	0.0008058	1241
1242	1,542,564	1,915,864,488	35.2420	10.7491	0.0008052	1242
1243	1,545,049	1,920,495,907	35.2562	10.7520	0.0008045	1243
1244	1,547,536	1,925,134,784	35.2704	10.7549	0.0008039	1244
1245	1,550,025	1,929,781,125	35.2846	10.7578	0.0008032	1245
1246	1,552,516	1,934,434,936	35.2987	10.7607	0.0008026	1246
1247	1,555,009	1,939,096,223	35.3129	10.7635	0.0008019	1247
1248	1,557,504	1,943,764,992	35.3270	10.7664	0.0008013	1248
1249	1,560,001	1,948,441,249	35.3412	10.7693	0.0008006	1249
1250	1,562,500	1,953,125,000	35.3553	10.7722	0.0008000	1250
1	1,3-2,3-4	,500, = 5,744	30.0000			

Powers, Roots and Reciprocals

Fowers, Roots and Recipiocals							
No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.	
1251	1,565,∞1	1,957,816,251	35.3695	10.7750	0.0007994	1251	
1252	1,567,504	1,962,515,008	35.3836	10.7779	0.0007987	1252	
1253	1,570,009	1,967,221,277	35.3977	10.7808	0.0007981	1253	
1254	1,572,516	1,971,935,064	35.4119	10.7837	0.0007974	1254	
1255	1,575,025	1,976,656,375	35.4260	10.7865	0.0007968	1255	
1256	1,577,536	1,981,385,216	35.4401	10.7894	0.0007962	1256	
1257	1,580,049	1,986,121,593	35.4542	10.7922	0.0007955	1257	
1258	1,582,564	1,990,865,512	35.4683	10.7951	0.0007949	1258	
1259	1,585,081	1,995,616,979	35.4824	10.7980	0.0007943	1259	
1260	1,587,600	2,000,376,000	35.4965	10.8008	0.0007937	1260	
1261	1,590,121	2,005,142,581	35.5106	10.8037	0.0007930	1261	
1262	1,592,644	2,009,916,728	35.5246	10.8065	0.0007924	1262	
1263	1,595,169	2,014,698,447	35.5387	10.8094	0.0007918	1263	
1264	1,597,696	2,019,487,744	35.5528	10.8122	0.0007911	1264	
1265	1,600,225	2,024,284,625	35.5668	10.8151	0.0007905	1265	
1266	1,602,756	2,029,089,096	35.5809	10.8179	0.0007899	1266	
1267	1,605,289	2,033,901,163	35 - 5949	10.8208	0.0007893	1267	
1268	1,607,824	2,038,720,832	35.6090	10.8236	0.0007886	1 268	
1269	1,610,361	2,043,548,109	35.6230	10.8265	0.0007880	1269	
1270	1,612,900	2,048,383,000	35.6371	10.8293	0.0007874	1270	
1271	1,615,441	2,053,225,511	35.6511	10.8322	0.0007868	1271	
1272	1,617,984	2,058,075,648	35.6651	10.8350	0.0007862	1272	
1273	1,620,529	2,062,933,417	35.6791	10.8378	0.0007855	1273	
1274	1,623,076	2,067,798,824	35.6931	10.8407	0.0007849	1274	
1275	1,625,625	2,072,671,875	35.7071	10.8435	0.0007843	1275	
1276	1,628,176	2,077,552,576	35.7211	10.8463	0.0007837	1276	
1277	1,630,729	2,082,440,933	35.7351	10.8492	0.0007831	1277	
1278	1,633,284	2,087,336,952	35.7491	10.8520	0.0007825	1278	
1279	1,635,841	2,092,240,639	35.7631	10.8548	0.0007819	1279	
1280	1,638,400	2,097,152,000	35.7771	10.8577	0.0007813	1280	
1281	1,640,961	2,102,071,041	35.7911	10.8605	0.0007806	1281	
1282	1,643,524	2,106,997,768	35.8050	10.8633	0.0007800	1282	
1283	1,646,089	2,111,932,187	35.8190	10.8661	0.0007794	1283	
1284	1,648,656	2,116,874,304	35.8329	10.8690	0.0007788	1284	
1285	1,651,225	2,121,824,125	35.8469	10.8718	0.0007782	1285	
1286	1,653,796	2,126,781,656	35.8608	10.8746	0.0007776	1 286	
1287	1,656,369	2,131,746,903	35.8748	10.8774	0.0007770	1287	
1288	1,658,944	2,136,719,872	35.8887	10.8802	0.0007764	1288	
1289	1,661,521	2,141,700,569	35.9026	10.8831	0.0007758	1289	
1290	1,664,100	2,146,689,000	35.9166	10.8859	0.0007752	1290	
1291	1,666,681	2,151,685,171	35.9305	10.8887	0.0007746	1291	
1292	1,669,264	2,156,689,088	35.9444	10.8915	0.0007740	1292	
1293	1,671,849	2,161,700,757	35.9583	10.8943	0.0007734	1293	
1294	1,674,436	2,166,720,184	35.9722	10.8971	0.0007728	1294	
1295	1,677,025	2,171,747,375	35.9861	10.8999	0.0007722	1295	
1296	1,679,616	2,176,782,336	36.0000	10.9027	0.0007716	1296	
1297	1,682,209	2,181,825,073	36.0139	10.9055	0.0007710	1297	
1298	1,684,804	2,186,875,592	36.0278	10.9083	0.0007704	1298	
1299	1,687,401	2,191,933,899	36.0416	10.9111	0.0007698	1299	
1300	1,690,000	2,197,000,000	36.0555	10.9139	0.0007692	1300	

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1301	1,692,601	2,202,073,901	36.0694	10.9167	0.0007686	1301
1302	1,695,204	2,207,155,608	36.0832	10.9195	0.0007680	1302
1303	1,697,809	2,212,245,127	36.0971	10.9223	0.0007675	1303
1304	1,700,416	2,217,342,464	36.1109	10.9251	0.0007669	1304
1305	1,703,025	2,222,447,625	36.1248	10.9279	0.0007663	1305
1306	1,705,636	2,227,560,616	36.1386	10.9307	0.0007657	1306
1307	1,708,249	2,232,681,443	36.1525	10.9335	0.0007651	1307
1308	1,710,864	2,237,810,112	36.1663	10.9363	0.0007645	1308
1309	1,713,481	2,242,946,629	36. 180 1	10.9391	0.0007639	1309
1310	1,716,100	2,248,091,000	36. 1939	10.9418	0.0007634	1310
1311	1,718,721	2,253,243,231	36.2077	10.9446	0.0007628	1311
1312	1,721,344	2,258,403,328	36.2215	10.9474	0.0007622	1312
1313	1,723,969	2,263,571,297	36.2353	10.9502	0.0007616	1313
1314	1,726,596	2,268,747,144	36.2491	10.9530	0.0007610	1314
1315	1,729,225	2,273,930,875	36.2629	10.9557	0.0007605	1315
1316	1,731,856	2,279,122,496	36.2767	10.9585	0.0007599	1316
1317	1,734,489	2,284,322,013	36.2905	10.9613	0.0007593	1317
1318	1,737,124	2,289,529,432	36.3043	10.9641	0.0007587	1318
1319	1,739,761	2,294,744,759	36.3180	10.9668	0.0007582	1319
1320	1,742,400	2,299,968,000	36.3318	10.9696	0.0007576	1320
1321	1,745,041	2,305,199,161	36.3456	10.9724	0.0007570	1321
1322	1,747,684	2,310,438,248	36.3593	10.9752	0.0007564	1322
1323	1,750,329	2,315,685,267	36.3731	10.9779	0.0007559	1323
1324	1,752,976	2,320,940,224	36.3868	10.9807	0.0007553	1324
1325	1,755,625	2,326,203,125	36.4005	10.9834	0.0007547	1325
1326	1,758,276	2,331,473,976	36.4143	10.9862	0.0007541	1326
1327	1,760,929	2,336,752,783	36.4280	10.9890	0.0007536	1327
1328	1,763,584	2,342,039,552	36.4417	10.9917	0.0007530	1328
1329	1,766,241	2,347,334,289	36.4555	10.9945	0.0007524	1329
1330	1,768,900	2,352,637,000	36.4692	10.9972	0.0007519	1330
1331	1,771,561	2,357,947,691	36.4829	11.0000	0.0007513	1331
1332	1,774,224	2,363,266,368	36.4966	11.0028	0.0007508	1332
1333	1,776,889	2,368,593,037	36.5103	11.0055	0.0007502	1333
1334	1,779,556	2,373,927,704	36.5240	11.0083	0.0007496	1334
1335	1,782,225	2,379,270,375	36.5377	11.0110	0.0007491	1335
1336	1,784,896	2,384,621,056	36.5513	11.0138	0.0007485	1336
1337	1,787,569	2,389,979,753	36.5650	11.0165	0.0007479	1337
1338	1,790,244	2,395,346,472	36.5787	11.0193	0.0007474	1338
1339	1,792,921	2,400,721,219	36.5923	11.0220	0.0007468	1339
1340	1,795,600	2,406,104,000	36.6060	11.0247	0.0007463	1340
1341	1,798,281	2,411,494,821	36.6197	11.0275	0.0007457	1341
1342	1,800,964	2,416,893,688	36.6333	11.0302	0.0007452	1342
1343	1,803,649	2,422,300,607	36.6470	11.0330	0.0007446	1343
1344	1,806,336	2,427,715.584	36.6606	11.0357	0.0007440	1344
1345	1,809,025	2,433,138,625	36.6742	11.0384	0.0007435	1345
1346	1,811,716	2,438,569,736	36.6879	11.0412	0.0007429	1346
1347	1,814,409	2,444,008,923	36.7015	11.0439	0.0007424	1347
1348	1,817,104	2,449,456,192	36.7151	11.0466	0.0007418	1348
1349	1,819,801	2,454,911,549	36.7287	11.0494	0.0007413	1349
1350	1,822,500	2,460,375,000	36.7423	11.0521	0.0007407	1350

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1351	1,825,201	2,465,846,551	36.7560	11.0548	0.0007402	1351
1352	1,827,904	2,471,326,208	36.7696	11.0575	0.0007396	1352
1353	1,830,609	2,476,813,977	36.7831	11.0603	0.0007391	1353
1354	1,833,316	2,482,309,864	36.7967	11.0630	0.0007386	1354
1355	1,836,025	2,487,813,875	36.8103	11.0657	0.0007380	1355
1356	1,838,736	2,493,326,016	36.8239	11.0684	0.0007375	1356
1357	1,841,449	2,498,846,293	36.8375	11.0712	0.0007369	1357
1358	1,844,164	2,504,374,712	36.8511	11.0739	0.0007364	1358
1359	1,846,881	2,509,911,279	36.8646	11.0766	0.0007358	1359
1360	1,849,6∞	2,515,456,000	36.8782	11.0793	0.0007353	1360
1361	1,852,321	2,521,008,881	36.8917	11.0820	0.0007348	1361
1362	1,855,044	2,526,569,928	36.9053	11.0847	0.0007342	1362
1363	1,857,769	2,532,139,147	36.9188	11.0875	0.0007337	1363
1364	1,860,496	2,537,716,544	36.9324	11.0902	0.0007331	1364
1365	1,863,225	2,543,302,125	36.9459	11.0929	0.0007326	1365
1366	1,865,956	2,548,895,896	36.9594	11.0956	0.0007321	1366
1367	1,868,689	2,554,497,863	36.9730	11.0983	0.0007315	1367
1368	1,871,424	2,560,108,032	36.9865	11.1010	0.0007310	1368
1369	1,874,161	2,565,726,409	37.0000	11.1037	0.0007305	1369
1370	1,876,9∞	2,571,353,000	37.0135	11.1064	0.0007299	1370
1371	1,879,641	2,576,987,811	37.0270	11.1091	0.0007294	1371
1372	1,882,384	2,582,630,848	37.0405	11.1118	0.0007289	1372
1373	1,885,129	2,588,282,117	37.0540	11.1145	0.0007283	1373
1374	1,887,876	2,593,941,624	37.0675	11.1172	0.0007278	1374
1375	1,890,625	2,599,609,375	37.0810	11.1199	0.0007273	1375
1376	1,893,376	2,605,285,376	37.0945	11.1226	0.0007267	1376
1377	1,896,129	2,610,969,633	37.1080	11.1253	0.0007262	1377
1378	1,898,884	2,616,662,152	37.1214	11.1280	0.0007257	1378
1379	1,901,641	2,622,362,939	37.1349	11.1307	0.0007252	1379
1380	1,904,400	2,628,072,000	37.1484	11.1334	0.0007246	1380
1381	1,907,161	2,633,789,341	37.1618	11.1361	0.0007241	1381
1382	1,909,924	2,639,514,968	37.1753	11.1387	0.0007236	1382
1383	1,912,689	2,645,248,887	37.1887	11.1414	0.0007231	1383
1384	1,915,456	2,650,991,104	37.2022	11.1441	0.0007225	1384
1385	1,918,225	2,656,741,625 2,662,500,456	37.2156	11.1468	0.0007120	1385
1387	1,923,769	2,668,267,603	37.2290	11.1495	0.0007215	•
1388	1,925,709	2,674,043,072	37.2424	11.1522	0.0007210	1387 1388
1389	1,929,321	2,679,826,869	37.2559 37.2693	11.1548	0.0007199	1389
1390	1,929,321	2,685,619,000	37.2827	11.15/5	0.0007199	1390
1391	1,934,881	2,691,419,471	37.2027	11.1629	0.0007189	
1391	1,934,661	2,697,228,288	37.2901	11.1629	0.0007184	1391 1392
1393	1,940,449	2,703,045,457	37.3229	11.1682	0.0007179	1392
1393	1,943,236	2,708,870,984	37.3363	11.1709	0.0007174	1393
1395	1,946,025	2,714,704,875	37.3303	11.1736	0.0007168	1395
1396	1,948,816	2,720,547,136	37.3631	11.1762	0.0007163	1396
1397	1,951,609	2,726,397,773	37.3765	11.1789	0.0007158	1397
1398	1,954,404	2,732,256,792	37.3898	11.1816	0.0007153	1398
1399	1,957,201	2,738,124,199	37.4032	11.1842	0.0007148	1399
1400	1,960,000	2,744,000,000	37.4166	11.1869	0.0007143	1400
-4		77 177 7 7 7 7	3, 14==0			

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1401	1,962,801	2,749,884,201	37.4299	11.1896	0.0007138	1401
1402	1,965,604	2,755,776,808	37 - 4433	11.1922	0.0007133	1402
1403	1,968,409	2,761,677,827	37.4566	11.1949	0.0007128	1403
1404	1,971,216	2,767,587,264	37.4700	11.1975	0.0007123	1404
1405	1,974,025	2,773,505,125	37.4833	11.2002	0.0007117	1405
1406	1,976,836	2,779,431,416	37.4967	11.2028	0.0007112	1406
1407	1,979,649	2,785,366,143	37.5100	11.2055	0.0007107	1407
1408	1,982,464	2,791,309,312	37.5233	11.2082	0.0007102	1408
1409	1,985,281	2,797,260,929	37.5366	11.2108	0.0007097	1409
1410	1,988,100	2,803,221,000	37.5500	11.2135	0.0007092	1410
1411	1,990,921	2,809,189,531	37.5633	11.2161	0.0007087	1411
1412	1,993,744	2,815,166,528	37.5766	11.2188	0.0007082	1412
1413	1,996,569	2,821,151,997	37.5899	11.2214	0.0007077	1413
1414	1,999,396	2,827,145,944	37.6032	11.2241	0.0007072	1414
1415	2,002,225	2,833,148,375	37.6165	11.2267	o.ooo7o67	1415
1416	2,005,056	2,839,159,296	37.6298	11.2293	0.0007062	1416
1417	2,007,889	2,845,178,713	37.6431	11.2320	0.0007057	1417
1418	2,010,724	2,851,206,632	37.6563	11.2346	0.0007052	1418
1419	2,013,561	2,857,243,059	37.6696	11.2373	0.0007047	1419
1420	2,016,400	2,863,288,000	37.6829	11.2399	0.0007042	1420
1421	2,019,241	2,869,341,461	37.6962	11.2425	0.0007037	1421
1422	2,022,084	2,875,403,448	37.7094	11.2452	0.0007032	1422
1423	2,024,929	2,881,473,967	37.7227	11.2478	0.0007027	1423
1423	2,027,776	2,887,553,024	37 - 7359	11.2504	0.0007022	1424
1424	2,030,625	2,893,640,625	37.7492	11.2531	0.0007018	1425
1426	2,033,476	2,899,736,776	37.7624	11.2557	0.0007013	1426
1427	2,036,329	2,905,841,483	37 - 7757	11.2583	0.0007008	1427
1427	2,039,184	2,911,954,752	37.7889	11.2610	0.0007003	1428
1429	2,042,041	2,918,076,589	37.8021	11.2636	ი.∞∞6998	1429
1429	2,044,900	2,924,207,000	37.8153	11.2662	ი.∞∞6993	1430
	2,047,761	2,930,345,991	37.8286	11.2689	0.∞6988	1431
1431	2,050,624	2,936,493,568	37.8418	11.2715	0.0006983	1432
1432	2,053,489	2,942,649,737	37.8550	11.2741	0.0006978	1433
	2,056,356	2,948,814,504	37.8682	11.2767	0.0006974	1434
1434	2,059,225	2,954,987,875	37.8814	11.2793	0.0006969	1435
1435	2,062,096	2,961,169,856	37.8946	11.2820	0.0006964	1436
1437	2,064,969	2,967,360,453	37.9078	11.2846	0.0006959	1437
1437	2,067,844	2,973,559,672	37.9210	11.2872	0.0006954	1438
1439	2,070,721	2,979,767,519	37.9342	11.2898	0.0006949	1439
1439	2,073,600	2,985,984,000	37.9473	11.2924	0.0006944	1440
1440	2,076,481	2,992,209,121	37.9605	11.2950	0.0006940	1441
1 ''	2,079,364	2,998,442,888	37.9737	11.2977	0.0006935	1442
1442	2,079,304	3,004,685,307	37.9868	11.3003	0.0006930	1443
1443	2,085,136	3,010,936,384	38.0000	11.3029	0.0006925	1444
1444	2,088,025	3,017,196,125	38.0132	11.3055	0.0006920	1445
1445	2,090,916	3,023,464,536	38.0263	11.3081	0.0006916	1446
1446	2,093,809	3,029,741,623	38.0395	11.3107	0.0006911	1447
1447	2,093,009	3,036,027,392	38.0526	11.3133	0.0006906	1448
1448	2,090,704	3,042,321,849	38.0657	11.3159	0.0006901	1449
1449	1	3,048,625,000	38.0789	11.3185	0.0006897	1450
1450	2,102,300	3,040,0-3,000	1 3	1	1	

Powers, Roots and Reciprocals

1451	No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1452 2,108,304 3,061,257,408 38.1051 11.3237 0.0006882 1453 1453 2,111,209 3,093,924,664 38.1314 11.3289 0.0006878 1454 1455 2,117,025 3,080,271,375 38.1445 11.3315 0.0006878 1454 1455 2,117,025 3,080,271,375 38.1445 11.3315 0.0006878 1454 1455 2,119,936 3,092,990,993 38.1707 11.3367 0.0006863 1457 1458 2,125,764 3,099,363,912 38.1838 11.3393 0.0006859 1458 1459 2,128,681 3,105,745,579 38.1969 11.3419 0.0006849 1450 1460 2,131,600 3,112,136,000 38.2099 11.3445 0.0006849 1460 1461 2,134,521 3,118,535,181 38.2390 11.3471 0.0006845 1461 1462 2,137,444 3,112,493,128 38.2390 11.3471 0.0006845 1461 1462 2,137,444 3,112,493,128 38.2391 11.3522 0.0006840 1462 1463 2,140,369 3,137,785,344 38.2623 11.3548 0.0006840 1462 1464 2,143,296 3,137,785,344 38.2633 11.3548 0.0006841 1464 1464 2,143,296 3,137,785,344 38.2633 11.3548 0.0006821 1465 1466 2,149,156 3,150,665,696 38.2884 11.3600 0.0006821 1466 1467 2,152,089 3,175,114,563 38.3014 11.3600 0.0006821 1466 1468 2,155,024 3,170,23,000 38.3406 11.3703 0.0006821 1467 1470 2,160,900 3,176,523,000 38.3406 11.3703 0.0006827 1469 1470 2,160,900 3,176,523,000 38.3406 11.3703 0.0006827 1471 1471 2,163,841 3,183,506,648 38.3567 11.3750 0.0006793 1471 1472 2,165,754 3,290,046,875 38.4987 11.3858 0.0006775 1476 1479 2,187,441 3,222,118,333 3.4488 11.3900 0.0006784 1471 1470 2,183,576 3,225,24,424 38.3927 11.3856 0.0006784 1471 1479 2,187,441 3,235,225,239 38.4578 11.3935 0.0006793 1473 1488 2,193,361 3,248,367,641 38.4488 11.3905 0.0006780 1478 1479 2,187,441 3,222,166,875 3,248,759,152 38.4488 11.3905 0.0006793 1479 1488 2,205,225 3,266,75,352 38.4488 11.4089 0.0006766 1479 1499 2,223,065 3,324,661,784	1451	2,105,401	3,054,936,851	38.0920	11.3211	0.0006892	1451
1453 2,111,209 3,067,586,677 38. 1182 11. 3263 0.0006878 1453 1454 2,111,016 3,073,924,664 38. 1314 11. 3289 0.0006878 1454 1455 2,117,025 3,086,271,375 38. 1445 11. 3315 0.0006868 1456 1457 2,122,849 3,092,990,993 38. 1707 11. 3367 0.0006868 1456 1457 2,122,849 3,092,990,993 38. 1707 11. 3367 0.0006869 1458 1459 2,128,661 3,105,745,579 38. 1969 11. 3419 0.0006859 1458 1460 2,131,600 3,112,136,000 38. 2909 11. 3419 0.0006849 1460 2,131,600 3,112,136,000 38. 2909 11. 3419 0.0006849 1460 1461 2,134,451 3,118,535,181 38. 2230 11. 3471 0.0006845 1461 1463 2,140,369 3,131,359,847 38. 2492 11. 3522 0.0006845 1462 1463 2,140,369 3,137,785,344 38. 2623 11. 3548 0.0006831 1464 2,143,296 3,137,785,344 38. 2623 11. 3548 0.0006831 1465 2,146,225 3,144,219,625 38. 2733 11. 3574 0.0006821 1466 2,152,089 3,157,114,563 38. 3014 11. 3626 0.0006817 1465 1468 2,155,024 3,165,575,232 38. 3445 11. 3652 0.0006817 1467 1468 2,157,961 3,170,044,709 38. 3275 11. 3677 0.0006807 1469 2,157,961 3,170,044,709 38. 3361 11. 3703 0.0006803 1470 1472 2,166,784 3,188,010,111 38. 3536 11. 3709 0.0006803 1470 1472 2,166,784 3,188,010,111 38. 3536 11. 3729 0.0006789 1473 1474 2,175,675 3,205,524,424 38. 4937 11. 3780 0.0006781 1479 1478 2,184,484 3,235,225,239 38. 4187 11. 3888 0.0006775 1476 1479 2,187,441 3,235,225,239 38. 4187 11. 3888 0.0006775 1476 1479 2,187,441 3,235,225,239 38. 4187 11. 3888 0.0006775 1476 1479 2,187,441 3,235,2525,239 38. 4578 11. 3936 0.0006781 1479 1488 2,211,169 3,224,379,526 38. 4388 11. 3936 0.0006775 1488 1488 2,219,049 3,241,792,000 38. 4578 11. 4097 0.0006761 1479 1492 2,222,066 3,324,579,515 38. 5367 11. 4166 0.000671 1499 1492 2,223,061 3,344,66						0.0006887	
1454	1453	2,111,209	3,067,586,677	38.1182	11.3263	0.0006882	
1455		2,114,116	3,073,924,664	38.1314	11.3289	0.0006878	
1456	1		3,080,271,375	38.1445	11.3315	0.0006873	
1457	1	2,119,936	3,086,626,816	38.1576		0.0006868	
1458	1457	2,122,849	3,092,990,993	38. 1707	11.3367	0.0006863	
1460		2,125,764	3,099,363,912	38. 1838		0.0006859	
1461 2,134,521 3,118,335,181 38.230 11.3471 0.006845 1461 1462 2,137,444 3,124,943,128 38.2361 11.3496 0.006840 1462 1463 2,140,369 3,131,359,847 38.2492 11.3522 0.006835 1463 1465 2,146,225 3,144,219,625 38.2753 11.3574 0.006826 1465 1466 2,149,156 3,157,114,563 38.3014 11.3626 0.006821 1465 1469 2,157,961 3,170,044,709 38.3275 11.3677 0.006821 1468 1470 2,160,900 3,176,523,000 38.3406 11.3793 0.006807 1479 1471 2,163,841 3,183,010,111 38.3536 11.3799 0.006798 1471 1472 2,166,784 3,189,06,048 38.3797 11.3780 0.006798 1472 1473 2,179,676 3,202,544,424 38.3927 11.3806 0.006784 1473 1475 2,178,576 3,225,				38.1969		0.0006854	
1461 2,134,521 3,118,535,181 38.2230 11.3471 0.006845 1461 1462 2,137,444 3,124,943,128 38.2492 11.3522 0.006845 1462 1463 2,140,369 3,131,359,847 38.2492 11.3522 0.006835 1463 1464 2,143,296 3,137,785,344 38.2623 11.3548 0.0006831 1464 1465 2,146,225 3,144,219,625 38.2753 11.3574 0.006826 1465 1467 2,152,089 3,157,114,563 38.3014 11.3626 0.006821 1466 1467 2,152,089 3,157,114,563 38.3014 11.3626 0.006821 1468 2,155,024 3,163,575,223 38.3145 11.3677 0.006807 1469 1470 2,160,900 3,176,523,000 38.3406 11.3703 0.0006807 1469 1471 2,163,841 3,183,01,111 38.3536 11.3729 0.006793 1472 1473 2,169,729 3,196,010,817 38.357 11.3750 0.006793 1472 1473 2,169,729 3,196,010,817 38.3927 11.3806 0.0006784 1474 1475 2,175,625 3,209,046,875 38.4057 11.3832 0.0006784 1474 1475 2,175,625 3,225,524,424 38.3927 11.3806 0.0006784 1474 1478 2,181,529 3,222,118,333 38.4187 11.3858 0.0006770 1477 1478 2,184,484 3,228,667,352 38.4488 11.3909 0.0006761 1479 1480 2,199,400 3,241,792,000 38.4708 11.3960 0.0006761 1479 1480 2,199,489 3,264,545,587 38.597 11.4063 0.0006743 1484 1482 2,199,489 3,264,545,587 38.597 11.4063 0.0006743 1484 1482 2,199,489 3,264,545,587 38.597 11.4063 0.0006720 1488 1488 2,220,225 3,268,147,904 38.527 11.4063 0.0006720 1488 1488 2,221,1169 3,288,083,03 38.5616 11.4104 0.0006720 1488 1490 2,220,100 3,324,790,157 38.6051 11.4191 0.0006701 1499 2,226,004 3,324,790,157 38.6051 11.4105 0.0006701 1499 1499 2,224,000 3,346,074,37 38.6051 11.4346 0.0006701 1499 1499 2,244,004 3,368,254,499 38.7040 11.4346 0.0006671 1499 1499 2,247,001 3,356,254,499 38.7040 11.4346 0.0006671 1499 1499 2,247,001 3,368,254,499 38.7040 11.4446 0.0006671 1499 14	1460	2,131,600	3,112,136,000	38.2009	11.3445	0.0006849	1460
1462 2,137,444 3,124,943,128 38.2361 11.3496 0.006840 1462 1463 2,140,369 3,131,359,847 38.2492 11.3522 0.0006835 1463 1464 2,143,296 3,131,359,847 38.2623 11.3548 0.0006826 1465 1465 2,146,225 3,144,219,625 38.2753 11.3574 0.0006826 1465 1466 2,149,156 3,150,662,696 38.2884 11.3600 0.0006826 1465 1468 2,155,024 3,163,575,232 38.3145 11.3652 0.0006817 1468 2,157,961 3,170,044,709 38.3275 11.3677 0.0006807 1469 1470 2,160,900 3,176,523,000 38.3406 11.3703 0.000698 1471 1472 2,165,841 3,183,506,048 38.3667 11.3752 0.0006798 1472 1473 2,169,729 3,196,010,817 38.377 11.3780 0.0006798 1472 1475 2,175,625 3,202,524,424 38.3927 11.3806 0.0006780 1474 1475 2,175,625 3,205,544,624 38.4957 11.3832 0.0006780 1474 1477 2,181,529 3,225,181,333 38.4187 11.3858 0.0006775 1476 1479 2,184,484 3,235,225,239 38.4578 11.3986 0.0006761 1478 1488 2,199,400 3,241,792,000 38.4708 11.3986 0.0006761 1478 1488 2,199,3361 3,248,367,641 38.488 11.3986 0.0006757 1476 1488 2,199,3361 3,248,367,641 38.488 11.3986 0.0006757 1476 1488 2,202,256 3,268,147,904 38.527 11.4063 0.0006757 1488 1488 2,203,225 3,274,759,125 38.5357 11.4037 0.0006734 1482 1488 2,202,256 3,284,379,256 38.5487 11.4114 0.0006720 1488 1488 2,214,144 3,294,646,272 38.5487 11.4114 0.0006720 1488 1499 2,220,100 3,324,790,157 38.6031 11.4268 0.0006701 1499 1499 2,226,064 3,321,287,488 38.6064 11.4268 0.0006701 1499 1499 2,226,064 3,321,287,488 38.6051 11.4319 0.0006702 1498 1499 2,224,004 3,324,790,473 38.6051 11.4319 0.0006684 1495 1499 2,224,004 3,324,790,473 38.6051 11.4319 0.0006693 1493 1494 2,233,036 3,334,661,784 38.6052 11.4319 0.0006690 1493 1499 2,224,004 3,336,324,499 38.7040 11.4346 0.	1461	2,134,521	3,118,535,181	38.2230		0.0006845	1461
1463 2,140,369 3,131,359,847 38.2492 11.3522 0.0006835 1463 1464 2,143,296 3,137,785,344 38.2623 11.3548 0.0006831 1464 1465 2,149,156 3,150,662,696 38.2884 11.3600 0.0006821 1466 1467 2,152,089 3,157,114,563 38.3014 11.3626 0.0006817 1467 1468 2,155,024 3,163,575,232 38.3145 11.3652 0.0006817 1468 1469 2,157,961 3,170,044,709 38.3275 11.3677 0.0006807 1469 1470 2,160,900 3,176,523,000 38.3406 11.3703 0.0006807 1471 1472 2,163,841 3,183,010,111 38.3536 11.3729 0.0006803 1470 1471 2,163,841 3,183,010,111 38.3536 11.3729 0.0006798 1471 1472 2,166,784 3,189,506,048 38.3667 11.3755 0.0006793 1472 1473 2,172,676 3,202,524,424 38.3927 11.3806 0.0006784 1474 1475 2,178,576 3,202,524,424 38.3927 11.3806 0.0006784 1474 1475 2,178,576 3,215,578,176 38.4187 11.3858 0.0006775 1476 1477 2,181,529 3,222,118,333 38.4318 11.3883 0.0006775 1476 1479 2,187,441 3,235,225,239 38.4578 11.3900 0.0006761 1479 1480 2,190,400 3,241,792,000 38.4708 11.3900 0.0006751 1480 1481 2,193,361 3,248,367,641 3,248,367,641 3,248,367,641 3,248,367,641 3,248,367,641 3,248,367,641 3,248,367,641 3,248,367,812 3,248,367,641 3,248,367,641 3,248,367,641 3,248,367,369 3,248,367,641 3,248,367,641 3,248,367,369 3,248,367,641 3,244,444 3,294,666,272 3,254,759,125 3,254,759,125 3,254,759,125 3,254,759,125 3,254,759,125 3,254,779,125	1462		3,124,943,128	38.2361	11.3496	0.0006840	1462
1465	1463		3,131,359,847	38. 2492		0.0006835	1463
1465	1464			38.2623		0.0006831	
1467	1465	2,146,225	3,144,219,625	38.2753		0.0006826	
1467	1466	2,149,156	3,150,662,696	38. 2884	11.3600	0.0006821	1466
1468	1467					0.0006817	
1469						0.0006812	
1470	1469					0.0006807	1469
1471	1470			38.3406		0.0006803	1470
1472 2,166,784 3,189,506,048 38.3667 11.3755 0.006793 1472 1473 2,169,729 3,196,010,817 38.3997 11.3780 0.006789 1473 1474 2,172,676 3,202,524,424 38.3927 11.3802 0.006780 1475 1475 2,178,576 3,225,578,176 38.4057 11.3832 0.006780 1475 1476 2,178,576 3,225,578,176 38.4187 11.3858 0.006775 1476 1477 2,181,529 3,222,118,333 38.4418 11.3983 0.006776 1477 1478 2,187,441 3,235,225,239 38.4458 11.3935 0.006766 1478 1480 2,190,400 3,241,792,000 38.478 11.3935 0.006761 1478 1481 2,193,361 3,248,367,641 38.4838 11.3936 0.006752 1481 1482 2,196,324 3,254,952,168 38.4968 11.4012 0.006752 1481 1483 2,199,289 3,261		2,163,841	3,183,010,111	38.3536		0.0006798	
1473		1				0.0006793	
1474 2,172,676 3,202,524,424 38.3927 11.3856 0.0006784 1474 1475 2,175,625 3,209,046,875 38.4057 11.3832 0.0006785 1475 1476 2,178,576 3,215,578,176 38.4187 11.3858 0.0006775 1475 1477 2,181,529 3,222,118,333 38.4318 11.3858 0.0006775 1477 1478 2,184,484 3,228,667,352 38.4318 11.3989 0.0006766 1478 1479 2,187,441 3,235,225,239 38.4578 11.3995 0.0006761 1479 1480 2,193,361 3,248,367,641 38.438 11.3986 0.0006757 1481 1481 2,193,361 3,248,367,641 38.438 11.3986 0.0006757 1481 1482 2,199,289 3,261,545,587 38.5097 11.4037 0.000673 1483 1484 2,205,225 3,268,147,904 38.5227 11.4063 0.0006734 1483 1485 2,205,225 <						0.0006789	1473
1475 2,175,625 3,209,046,875 38.4057 11.3832 0.006780 1475 1476 2,178,576 3,215,578,176 38.4187 11.3838 0.006775 1476 1477 2,181,529 3,222,118,333 38.4187 11.3883 0.006775 1476 1478 2,184,484 3,228,667,352 38.4448 11.3909 0.006766 1478 1480 2,190,400 3,241,792,000 38.4578 11.3935 0.006761 1479 1481 2,193,361 3,248,367,641 38.4988 11.3986 0.006757 1480 1482 2,196,324 3,254,952,168 38.4968 11.4012 0.006757 1481 1482 2,196,324 3,254,952,168 38.5097 11.4012 0.006748 1482 1483 2,199,289 3,261,545,587 38.5097 11.4062 0.006734 1483 1485 2,205,225 3,274,759,125 38.5357 11.4069 0.006734 1485 1486 2,205,225 3,28						0.0006784	
1476							
1477 2,181,529 3,222,118,333 38.4318 11.3883 0.006770 1477 1478 2,184,484 3,228,667,352 38.4448 11.3999 0.0006760 1478 1479 2,187,441 3,235,225,239 38.4478 11.3935 0.0006761 1478 1480 2,190,400 3,241,792,000 38.4708 11.3936 0.0006757 1480 1481 2,193,361 3,248,367,641 38.4968 11.4012 0.0006748 1481 1482 2,196,324 3,254,952,168 38.4968 11.4012 0.0006748 1482 1483 2,199,289 3,261,545,587 38.5097 11.4037 0.0006743 1483 1484 2,202,256 3,268,147,904 38.5227 11.4063 0.0006739 1484 1485 2,208,196 3,281,379,256 38.5387 11.4114 0.0006739 1485 1486 2,208,196 3,288,008,303 38.5616 11.4140 0.0006729 1488 1488 2,211,121						0.0006775	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1477		3,222,118,333	38.4318	11.3883	0.0006770	1477
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1478	2,184,484	3,228,667,352	38.4448	11.3909	0.0006766	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1479	2,187,441	3,235,225,239	38.4578	11.3935	0.0006761	1479
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		2,190,400					1480
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1481	2,193,361	3,248,367,641	38.4838	11.3986	0.0006752	1481
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1482	2,196,324	3,254,952,168	38.4968	11.4012	0.0006748	1482
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1483	2,199,289	3,261,545,587	38.5097	11.4037	0.0006743	1483
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1484	2,202,256	3,268,147,904	38.5227	11.4063	0.0006739	1484
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1485	2,205,225	3,274,759,125	38.5357	11.4089	0.0006734	1485
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1486	2,208,196	3,281,379,256	38.5487	11.4114	0.0006729	1486
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1487	2,211,169	3,288,008,303	38.5616	11.4140	0.0006725	1487
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1488	2,214,144	3,294,646,272	38.5746	11.4165	0.0006720	1488
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1489	2,217,121	3,301,293,169	38.5876	11.4191	0.0006716	1489
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1490	2,220,100	3,307,949,000	38.6005	11.4216	0.0006711	1490
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1491	2,223,081	3,314,613,771	38.6135	11.4242	0.0006707	149T
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	1492	2,226,064	3,321,287,488	38.6264	11.4268	0.0006702	1492
1495 2,235,025 3,341,362,375 38.6652 11.4344 0.006689 1495 1496 2,238,016 3,348,071,936 38.6782 11.4370 0.006684 1496 1497 2,241,009 3,354,790,473 38.6911 11.4395 0.006680 1497 1498 2,244,004 3,361,517,992 38.7040 11.4421 0.006676 1498 1499 2,247,001 3,368,254,499 38.7169 11.4446 0.006671 1499	1493	2,229,049	3,327,970,157	38.6394	11.4293		1493
1496 2,238,016 3,348,071,936 38.6782 11.4370 0.006684 1496 1497 2,241,009 3,354,790,473 38.6911 11.4395 0.006680 1497 1498 2,244,004 3,361,517,992 38.7040 11.4421 0.006676 1498 1499 2,247,001 3,368,254,499 38.7169 11.4446 0.006671 1499	1494	2,232,036	3,334,661,784	38.6523	11.4319	0.0006693	1494
1497 2,241,009 3,354,790,473 38.6911 11.4395 0.006680 1497 1498 2,244,004 3,361,517,992 38.7040 11.4421 0.006676 1498 1499 2,247,001 3,368,254,499 38.7169 11.4446 0.006671 1499	1495	2,235,025	3,341,362,375	38.6652	11.4344		1495
1498 2,244,004 3,361,517,992 38.7040 11.4421 0.006676 1498 1499 2,247,001 3,368,254,499 38.7169 11.4446 0.006671 1499	1496	2,238,016	3,348,071,936	38.6782	11.4370	0.0006684	1496
1499 2,247,001 3,368,254,499 38.7169 11.4446 0.0006671 1499	1497	2,241,009	3,354,790,473		11.4395		1497
1 100 1 100 1 100 1 100 100 100 100 100	1498	2,244,004			11.4421		1498
1500 2,250,000 3,375,000,000 38.7298 11.4471 0.0006667 1500							
	1500	2,250,000	3,375,000,000	38.7298	11.4471	0.0006667	1500

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1501	2,253,∞1	3,381,754,501	38.7427	11.4497	0.0006662	1501
1502	2,256,004	3,388,518,008	38.7556	11.4522	0.0006658	1502
1503	2,259,009	3,395,290,527	38.7685	11.4548	0.0006653	1503
1504	2,262,016	3,402,072,064	38.7814	11.4573	0.0006649	1504
1505	2,265,025	3,408,862,625	38.7943	11.4598	0.0006645	1505
1506	2,268,036	3,415,662,216	38.8072	11.4624	0.0006640	1506
1507	2,271,049	3,422,470,843	38.8201	11.4649	0.0006636	1507
1508	2,274,064	3,429,288,512	38.8330	11.4675	0.0006631	1508
1509	2,277,081	3,436,115,229	38.8458	11.4700	0.0006627	1509
1510	2,280,100	3,442,951,000	38.8587	11.4725	0.0006623	1510
1511	2,283,121	3,449,795,831	38.8716	11.4751	0.0006618	1511
1512	2,286,144	3,456,649,728	38.8844	11.4776	0.0006614	1512
1513	2,289,169	3,463,512,697	38.8973	11.4801	0.0005609	1513
1514	2,292,196	3,470,384,744	38.9102	11.4826	0.0005605	1514
1515	2,295,225	3,477,265,875	38.9230	11.4852	0.0006601	1515
1516	2,298,256	3,484,156,096	38.9358	11.4877	0.0006596	1516
1517	2,301,289	3,491,055,413	38.9487	11.4902	0.0006592	1517
1518	2,304,324	3,497,963,832	38.9615	11.4927	0.0006588	1518
1519	2,307,361	3,504,881,359	38.9744	11.4953	0.0006583	1519
1520	2,310,400	3,511,808,000	38.9872	11.4978	0.0005579	1520
1521	2,313,441	3,518,743,761	39.0000	11.5003	0.0005575	1521
1522	2,316,484	3,525,688,648	39.0128	11.5028	0.0006570	1522
1523	2,319,529	3,532,642,667	39.0256	11.5054	0.0005565	1523
1524	2,322,576	3,539,605,824	39.0384	11.5079	0.0006562	1524
1525	2,325,625	3,546,578,125	39.0512	11.5104	0.0006557	1525
1526	2,328,676	3,553,559,576	39.0640	11.5129	0.0006553	1526
1527	2,331,729	3,560,550,183	39.0768	11.5154	0.0006549	1527
1528	2,334,784	3,567,549,952	39.0896	11.5179	0.000545	1528
1529	2,337,841	3,574,558,889	39.1024	11.5204	0.0006540	1529
1530	2,340,900	3,581,577,000	39.1152	11.5230	0.0006536	1530
1531	2,343,961	3,588,604,291	39.1280	11.5255	0.0006532	1531
1532	2,347,024	3,595,640,768	39.1408	11.5280	0.0005527	1532
1533	2,350,089	3,602,686,437	39.1535	11.5305	0.0005523	1533
1534	2,353,156	3,609,741,304	39.1563	11.5330	0.0006519	1534
	2,356,225	3,616,805,375	39.1791	11.5355	0.0006515	1535
1535	2,350,225	3,623,878,656	39.1791	11.5380	0.0006510	1535
1537	2,362,369	3,630,961,153	39.2046	11.5405	0.0006506	1537
1538	2,365,444	3,638,052,872	39.2040	11.5430	0.0006502	1538
1539	2,368,521	3,645,153,819	39.2173	11.5455	0.0005498	1539
1540	2,371,600	3,652,264,000	39.2301	11.5480	0.0005494	1540
1541	2,374,681	3,659,383,421	39.2426	11.5505	0.0006489	1541
1541	2,374,081	3,666,512,088	39.2683	11.5530	0.000485	1542
1543	2,380,849	3,673,650,007	39.2810	11.5555	0.0006481	1543
1544	2,383,936	3,680,797,184	39.2010	11.5580	0.0006477	1544
1545	2,387,025	3,687,953,625	39.3065	11.5605	0.0006477	1545
1546	2,390,116	3,695,119,336	39.3192	11.5630	0.0006468	1546
1547	2,393,209	3,702,294,323	39.3319	11.5655	0.0006464	1547
1548	2,396,304	3,709,478,592	39.3446	11.5680	0.0006460	1548
1549	2,399,401	3,716,672,149	39.3573	11.5705	0.0006456	1549
1550	2,402,500	3,723,875,000	39.3700	11.5729	0.0006452	1550
	74-75	0.7 = 07 - 7 0 7 0 0 =	05.07.12	1		1 000

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1551	2,405,601	3,731,087,151	39.3827	11.5754	0.0006447	1551
1552	2,408,704	3,738,308,608	39.3954	11.5779	0.0006443	1552
1553	2,411,809	3,745,539,377	39.4081	11.580.4	0.0006439	1553
1554	2,414,916	3,752,779,464	39.4208	11.5829	0.0006435	1554
1555	2,418,025	3,760,028,875	39 - 4335	11.5854	0.0006431	1555
1556	2,421,136	3,767,287,616	39.4462	11.5879	0.0006427	1556
1557	2,424,249	3,774,555,693	39.4588	11.5903	0.0006423	1557
1558	2,427,364	3,781,833,112	39.4715	11.5928	0.0006418	1558
1559	2,430,481	3,789,119,879	39.4842	11.5953	0.0006414	1559
1560	2,433,600	3,796,416,000	39.4968	11.5978	0.0006410	1560
1561	2,436,721	3,803,721,481	39.5095	11.6∞3	0.0 0064 0 6	1561
1562	2,439,844	3,811,036,328	39.5221	11.6027	0.0006402	1562
1563	2,442,969	3,818,360,547	39.5348	11.6052	o.ooo6398	1563
1564	2,446,096	3,825,694,144	39.5474	11.6077	0.0006394	1564
1565	2,449,225	3,833,037,125	39.5601	11.6102	0.0006390	1565
1566	2,452,356	3,840,389,496	39.5727	11.6126	0.0006 386	1566
1567	2,455,489	3,847,751,263	39.58 5 4	11.6151	o.∞6382	1567
1568	2,458,624	3,855,123,432	39.5980	11.6176	0.0006378	1568
1569	2,461,761	3,862,503,009	39.61 0 6	11.6200	0.0006373	1569
1570	2,464,9∞	3,869,893,000	39.6232	11.6225	o.∞o6369	1570
1571	2,468,041	3,877,292,411	39.6358	11.6250	0.0006365	1571
1572	2,471,184	3,884,701,248	39.6485	11.6274	0.0006361	1572
1573	2,474,329	3,892,119,517	39.6611	11.6299	0.0006357	1573
1574	2,477,476	3,899,547,224	39.6737	11.6324	o.ooo6353	1574
1575	2,480,625	3,906,984,375	39.6863	11.6348	0.0006349	1575
1576	2,483,776	3,914,430,976	39.6989	11.6373	0.0006345	1576
1577	2,486,929	3,921,887,033	39.7115	11.6398	0.0006341	1577
1578	2,490,084	3,929,352,552	39.7240	11.6422	0.0006337	1578
1579	2,493,241	3,936,827,539	39.7366	11.6447	0.0006333	1579
1580	2,496,400	3,944,312,000	39.7492	11.6471	0.0006329	1580
1581	2,499,561	3,951,805,941	39.7618	11.6496	0.0006325	1581
1582	2,502,724	3,959,309,368	39.7744	11.6520	0.0006321	1582
1583	2,505,889	3,966,822,287	39.7869	11.6545	0.0006317	1583
1584	2,509,056	3,974,344,704	39.7995	11.6570	0.0006313	1584
1585	2,512,225	3,981,876,625	39.8121	11.6594	0.0006309	1585
1586	2,515,396	3,989,418,056	39.8246	11.6619	0.0006305	1586
1587	2,518,569	3,996,969,∞3	39.8372	11.6643	0.0006301	1587
1588	2,521,744	4,004,529,472	39.8497	11.6668	0.0006297	1588
1589	2,524,921	4,012,099,469	39.8623	11.6692	0.0006293	1589
1590	2,528,100	4,019,679,000	39.8748	11.6717	0.0006289	1590
1591	2,531,281	4,027,268,071	39.8873	11.6741	0.0006285	1591
1592	2,534,464	4,034,866,688	39.8999	11.6765	0.0006281	1592
1593	2,537,649	4,042,474,857	39.9124	11.6790	0.0006277	1593
1594	2,540,836	4,050,092,584	39.9249	11.6814	0.0006274	1594
1595	2,544,025	4,057,719,875	39.9375	11.6839	0.0006270	1595
1596	2,547,216	4,065,356,736	39.95∞	11.6863	0.0006266	1596
1597	2,550,409	4,073,003,173	39.9625	11.6887	0.0006262	1597
1598	2,553,604	4,080,659,192	39.9750	11.6912	0.0006258	1598
1599	2,556,801	4,088,324,799	39.9875	11.6936	0.0006254	1599
1600	2,560,000	4,096,000,000	40.0000	11.6961	5.000250	1000

No.	Square	Cube	Sq. R∞t	Cube Root	Reciprocal	No.
1601	2,563,201	4,103,684,801	40.0125	11.6985	0.0006246	1601
1602	2,566,404	4,111,379,208	40.0250	11.7009	0.0006242	1602
1603	2,569,609	4,119,083,227	40.0375	11.7034	0.0005238	1603
1604	2,572,816	4,126,796,864	40.0500	11.7058	0.0006234	1604
1605	2,576,025	4,134,520,125	40.0625	11.7082	0.0006231	1605
1606	2,579,236	4,142,253,016	40.0749	11.7107	0.0006227	1606
1607	2,582,449	4,149,995,543	40.0874	11.7131	0.0006223	1607
1608	2,585,664	4,157,747,712	40.0999	11.7155	0.0006219	1608
1609	2,588,881	4,165,509,529	40.1123	11.7180	0.0006215	1609
1610	2,592,100	4,173,281,000	40.1248	11.7204	0.0006211	1610
1611	2,595,321	4,181,062,131	40.1373	11.7228	0.0006207	1611
1612	2,598,544	4,188,852,928	40.1497	11.7252	0.0006203	1612
1613	2,601,769	4,196,653,397	40.1622	11.7277	0.0006200	1613
1614	2,604,996	4,204,463,544	40.1746	11.7301	0.0006196	1614
1615	2,608,225	4,212,283,375	40.1871	11.7325	0.0006192	1615
1616	2,611,456	4,220,112,896	40.1995	11.7349	0.0006188	1616
1617	2,614,689	4,227,952,113	40.2119	11.7373	0.0006184	1617
1618	2,617,924	4,235,801,032	40.2244	11.7398	0.0006180	1618
1619	2,621,161	4,243,659,659	40.2368	11.7422	0.0006177	1619
1620	2,624,400	4,251,528,000	40.2492	11.7446	0.0006173	1620
1621	2,627,641	4,259,406,061	40.2616	11.7470	0.0006169	1621
1622	2,630,884	4,267,293,848	40.2741	11.7494	0.0006165	1622
1623	2,634,129	4,275,191,367	40.2865	11.7518	0.0006161	1623
1624	2,637,376	4,283,098,624	40.2989	11.7543	0.0006158	1624
1625	2,640,625	4,291,015,625	40.3113	11.7567	0.0006154	1625
1626	2,643,876	4,298,942,376	40.3237	11.7591	0.0006150	1626
1627	2,647,129	4,306,878,883	40.3361	11.7615	0.0006146	1627
1628	2,650,384	4,314,825,152	40.3485	11.7639	0.0006143	1628
1629	2,653,641	4,322,781,189	40.3609	11.7663	0.0006139	1629
1630	2,656,9∞	4,330,747,000	40.3733	11.7687	0.0006135	1630
1631	2,660,161	4,338,722,591	40.3856	11.7711	0.0006131	1631
1632	2,663,424	4,346,707,968	40.3980	11.7735	0.0006127	1632
1633	2,666,689	4,354,703,137	40.4104	11.7759	0.0006124	1633
1634	2,669,956	4,362,708,104	40.4228	11.7783	0.0006120	1634
1635	2,673,225	4,370,722,875	40.4351	11.7807	0.0006116	1635
1636	2,676,496	4,378,747,456	40.4475	11.7831	0.0006112	1636
1637	2,679,769	4,386,781,853	40.4599	11.7855	0.0006109	1637
1638	2,683,044	4,394,826,072	40.4722	11.7879	0.0006105	1638
1639	2,686,321	4,402,880,119	40.4846	11.7903	0.0006101	1639
1640	2,689,6∞	4,410,944,000	40.4969	11.7927	0.0006098	1640
1641	2,692,881	4,419,017,721	40.5093	11.7951	0.0006094	1641
1642	2,696,164	4,427,101,288	40.5216	11.7975	0.0006090	1642
1643	2,699,449	4,435,194,707	40.5339	11.7999	0.0006086	1643
1644	2,702,736	4,443,297,984	40.5463	11.8023	0.0006083	1644
1645	2,706,025	4,451,411,125	40.5586	11.8047	0.0006079	1645
1646	2,709,316	4,459,534,136	40.5709	11.8071	0.0006075	1646
1647	2,712,609	4,467,667,023	40.5832	11.8095	0.0006072	1647
1648	2,715,904	4,475,809,792	40. 5956	11.8119	0.0006068	1648
1649	2,719,201	4,483,962,449	40.6079	11.8143	0.0006064	1649
1650	2,722,500	4,492,125,000	40.6202	11.8167	0.0006061	1650

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1651	2.725,801	4,500,297,451	40.6325	11.8190	0.0006057	1651
1652	2,729,104	4,508,479,808	40.6448	11.8214	0.0006053	1652
1653	2,732,409	4,516,672,077	40.6571	11.8238	0.0006050	1653
1654	2,735.716	4,524,874,264	40.6694	11.8262	0.0006046	1654
1655	2,739,025	4,533,086,375	40.6817	11.8286	0.0006042	1655
1656	2,742,336	4,541,308,416	40.6940	11.8310	0.0006039	1656
1657	2,745,649	4,549,540,393	40.7063	11.8333	0.0006035	1657
1658	2,748,964	4,557,782,312	40.7185	11.8357	0.0006031	1658
1659	2,752,281	4,566,034,179	40.7308	11.8381	0.0006028	1659
1660	2,755,6∞	4.574,296,000	40.7431	11.8405	0.0006024	1660
1661	2,758,921	4,582,567,781	40.7554	11.8429	0.0006020	1661
1662	2,762,244	4,590,849,528	40.7676	11.8452	0.0006017	1662
1663	2,765,569	4,599,141,247	40.7799	11.8476	0.0005013	1663
1664	2,768,896	4,607,442,944	40.7922	11.8500	0.0006010	1664
1665	2,772,225	4,615,754,625	40.8044	11.8524	0.0006006	1665
1666	2,775,556	4,624,076,296	40.8167	11.8547	0.0005002	1666
1667	2,778,889	4,632,407,963	40.8289	11.8571	0.0005999	1667
1668	2,782,224	4,640,749,632	40.8412	11.8595	0.0005995	1668
1669	2,785,561	4,649,101,309	40.8534	11.8618	0.0005992	1669
1670	2,788,900	4,657,463,000	40.8656	11.8642	0.0005988	1670
1671	2,792,241	4,665,834,711	40.8779	11.8666	0.0005984	1671
1672	2,795,584	4,674,216,448	40.8901	11.8689	0.0005981	1672
1673	2,798,929	4,682,608,217	40.9023	11.8713	0.0005977	1673
1674	2,802,276	4,691,010,024	40.9145	11.8737	0.0005974	1674
1675	2,805,625	4,699,421,875	40.9268	11.8760	0.0005970	1675
1676	2,808,976	4,707,843,776	40.9390	11.8784	0.0005967	1676
1677	2,812,329	4,716,275,733	40.9512	11.8808	0.0005963	1677
1678	2,815,684	4,724,717,752	40.9634	11.8831	0.0005959	1678
1679	2,819,041	4,733,169,839	40.9756	11.8855	0.0005956	1679
1680	2,822,400	4,741,632,000	40.9878	11.8878	0.0005952	1680
1681	2,825,761	4,750,104,241	41.0000	11.8902	0.0005949	1681
1682	2,829,124	4,758,586,568	41.0122	11.8926	0.0005945	1682
1683	2,832,489	4,767,078,987	41.0244	11.8949	0.0005942	1683
1684	2,835,856	4,775,581,504	41.0366	11.8973	0.0005938	1684
1685	2,839,225	4,784,094,125	41.0487	11.8996	0.0005935	1685
1686	2,842,596	4,792,616,856	41.0609	11.9020	0.0005931	1686
1687	2,845,969	4,801,149,703	41.0731	11.9043	0.0005928	1687
1688	2,849,344	4,809,692,672	41.0853	11.9067	0.0005924	1688
1689	2,852,721	4,818,245,769	41.0974	11.9090	0.0005921	1689
1690	2,856,100	4,826,809,000	41.1096	11.9114	0.0005917	1690
1691	2,859,481	4,835,382,371	41.1218	11.9137	0.0005914	1691
1692	2,862,864	4,843,965,888	41.1339	11.9161	0.0005910	1692
1693	2,866,249	4,852,559,557	41.1461	11.9184	0.0005907	1693
1694	2,869,636	4,861,163,384	41.1582	11.9208	0.0005903	1694
1695	2,873,025	4,869,777,375	41.1704	11.9231	0.0005900	1695
1696	2,876,416	4,878,401,536	41.1825	11.9255	0.0005896	1696
1697	2,879,809	4,887,035,873	41.1947	11.9278	0.0005893	1697
1698	2,883,204	4,895,680,392	41.2068	11.9301	0.0005889	1698
1699	2,886,601	4,904,335,099	41.2189	11.9325	0.0005886	1699
1700	2,890,000	4,913,000,000	41.2311	11.9348	0.0005882	1700
1/00	2,090,000	4,913,000,000	41.231	11.9340	5.0003002	1,00

		1			T	
No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1701	2,893,401	4,921,675,101	41.2432	11.9372	0.0005879	1701
1702	2,896,804	4,930,360,408	41.2553	11.9395	0.0005875	1702
1703	2,900,209	4,939,055,927	41.2674	11.9418	0.0005872	1703
1704	2,903,616	4,947,761,664	41.2795	11.9442	0.0005869	1704
1705	2,907,025	4,956,477,625	41.2916	11.9465	0.0005865	1705
1706	2,910,436	4,965,203,816	41.3038	11.9489	0.0005862	1706
1707	2,913,849	4,973,940,243	41.3159	11.9512	0.0005858	1707
1708	2,917,264	4,982,686,912	41.3280	11.9535	0.0005855	1708
1709	2,920,681	4,991,443,829	41.3401	11.9559	0.0005851	1709
1710	2,924,100	5,000,211,000	41.3521	11.9582	0.0005848	1710
1711	2,927,521	5,008,988,431	41.3642	11.9605	0.0005845	1711
1712	2,930,944	5,017,776,128	41.3763	11.9528	0.0005841	1712
1713	2,934,369	5,026,574,037	41.3884	11.9652	0.0005838	1713
1714	2,937,796	5,035,382,344	41.4005	11.9675	0.0005834	1714
1715	2,941,225	5,044,200,875	41.4126	11.9698	ი. ∞აევვე	1715
1716	2,944,656	5,053,029,696	41.4246	11.9722	0.0005828	1716
1717	2,948,089	5,061,868,813	41.4367	11.9745	0.0005324	1717
1718	2,951,524	5,070,718,232	41.4488	11.9768	0.0005821	1718
1719	2,954,961	5,079,577,959	41.4608	11.9791	0.0005817	1719
1720	2,958,400	5,088,448,000	41.4729	11.9815	0.0005814	1720
1721	2,961,841	5,097,328,361	41.4849	11.9838	0.0005811	1721
1722	2,965,284	5,105,219,048	41.4970	11.9861	0.0005807	1722
1723	2,968,729	5,115,120,057	41.5090	11.9884	0.0005804	1723
1724	2,972,176	5,124,031,424	41.5211	11.9907	0.0005800	1724
1725	2,975,625	5,132,953,125	41.5331	11.9931	0.0005797	1725
1726	2,979,076	5,141,885,176	41.5452	11.9954	0.0005794	1726
1727	2,982,529	5,150,827,583	41.5572	11.9977	0.0005790	1727
1728	2,985,984	5,159,780,352	41.5692	12.0000	0.0005787	1728
1729	2,989,441	5,163,743,489	41.5812	12.0023	0.0005784	1729
1730	2,992,900	5,177,717,000	41.5933	12.0046	0.0005780	1730
1731	2,996,361	5,185,700,891	41.6053	12.∞69	0.0005777	1731
1732	2,999,824	5,195,695,163	41.6173	12.0093	0.0005774	1732
1733	3,003,289	5,204,699,837	41.6293	12.0116	0.0005770	1733
1734	3,006,756	5,213,714,904	41.6413	12.0139	0.0005767	1734
1735	3,010,225	5,222,740,375	41.6533	12.0162	0.0005764	1735
1736	3,013,696	5,231,776,256	41.6653	12.0185	o.0005760	1736
1737	3,017,169	5,240,822,553	41.6773	12.0208	0.0005757	1737
1738	3,020,644	5,249,879,272	41.6893	12.0231	0.∞05754	1738
1739	3,024,121	5,258,946,419	41.7013	12.0254	0.0005750	1739
1740	3,027,600	5,268,024,000	41.7133	12.0277	0.0005747	1740
1741	3,031,081	5,277,112,021	41.7253	12.0300	0.0005744	1741
1742	3,034,564	5,286,210,488	41.7373	12.0323	0.0005741	1742
1743	3,038,049	5,295,319,407	41.7493	12.0346	0.0005737	1743
1744	3,041,536	5,304,438,784	41.7612	12.0369	0.0005734	1744
1745	3,045,025	5,313,568,625	41.7732	12.0392	0.0005731	1745
1746	3,048,516	5,322,708,936	41.7852	12.0415	0.0005727	1746
1747	3,052,009	5,331,859,723	41.7971	12.0438	0.0005724	1747
1748	3,055,504	5,341,020,992	41.8091	12.0461	0.0005721	1748
1749	3,059,001	5,350,192,749	41.8210	12.0484	0.0005718	1749
1750	3,062,500	5,359,375,000	41.8330	12.0507	0.0005714	1750

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1751	3,066,001	5,368,567,751	41.8450	12.0530	0.0005711	1751
1752	3,069,504	5,377,771,008	41.8569	12.0553	0.0005708	1752
1753	3,073,009	5.386,984,777	41.8688	12.0576	0.0005705	1753
1754	3,076,516	5,396,209,064	41.8808	12.0599	0.0005701	1754
1755	3,080,025	5,405,443,875	41.8927	12.0622	0.0005698	1755
1756	3,083,536	5,414,689,216	41.9047	12.0645	0.0005695	1756
1757	3,087,049	5,423,945,093	41.9166	12.0668	0.0005692	1757
1758	3,090,564	5,433,211,512	41.9285	12.0690	0.0005688	1758
1759	3,094,081	5,442,488,479	41.9404	12.0713	0.0005685	1759
1760	3,097,600	5,451,776,000	41.9524	12.0736	0.0005682	1760
1761	3,101,121	5,461,074,081	41.9643	12.0759	0.0005679	1761
1762	3,104,644	5,470,382,728	41.9762	12.0782	0.0005675	1762
1763	3,108,169	5,479,701,947	41.9881	12.0805	0.0005672	1763
1764	3,111,696	5,489,031,744	42,0000	12.0828	0.0005669	1764
1765	3,115,225	5,498,372,125	42.0119	12.0850	0.0005666	1765
1766	3,118,756	5,507,723,096	42.0238	12.0873	0.0005663	1766
1767	3,122,289	5,517,084,663	42.0357	12.0896	0.0005659	1767
1768	3,125,824	5,526,456,832	42.0476	12.0919	0.0005656	1768
1769	3,129,361	5,535,839,609	42.0595	12.0942	0.0005653	1769
1770	3,132,900	5,545,233,000	42.0714	12.0964	0.0005650	1770
1771	3,136,441	5,554,637,011	42.0833	12.0987	0.0005647	1771
1772	3,139,984	5,564,051,648	42.0951	12.1010	0.0005643	1772
1773	3,143,529	5,573,476,917	42.1070	12.1033	0.0005640	1773
1774	3,147,076	5,582,912,824	42.1189	12.1056	0.0005637	1774
1775	3,150,625	5,592,359,375	42.1307	12.1078	0.0005634	1775
1776	3,154,176	5,601,816,576	42.1426	12.1101	0.0005631	1776
1777	3,157,729	5,611,284,433	42.1545	12.1124	0.0005627	1777
1778	3,161,284	5,620,762,952	42.1663	12.1146	0.0005624	1778
1779	3,164,841	5,630,252,139	42.1782	12.1169	0.0005621	1779
1780	3,:68,400	5,639,752,000	42.1900	12.1192	0.0005618	1780
1781	3,171,961	5,649,262,541	42.2019	12.1215	0.0005615	1781
1782	3,175,524	5,658,783,768	42.2137	12.1237	0.0005612	1782
1783	3,179,089	5,668,315,687	42.2256	12.1260	0.0005609	1783
1784	3,182,656	5,677,858,304	42.2374	12.1283	0.0005605	1784
1785	3,186,225	5,687,411,625	42.2493	12.1305	0.0005602	1785
1786	3,189,796	5,696,975,656	42.2611	12.1328	0.0005599	1786
1787	3,193,369	5,706,550,403	42.2729	12.1350	0.0005596	1787
1788	3,196,944	5,716,135,872	42.2847	12.1373	0.0005593	1788
1789	3,200,521	5,725,732,069	42.2966	12.1396	0.0005590	1789
1790	3,204,100	5,735,339,000	42.3084	12.1418	0.0005587	1790
1791	3,207,681	5,744,956,671	42.3202	12.1441	0.0005583	1791
1792	3,211,264	5,754,585,088	42.3320	12.1464	0.0005580	1792
1793	3,214,849	5,764,224,257	42.3438	12.1486	0.0005577	1793
1794	3,218,436	5,773,874,184	42.3556	12.1509	0.0005574	1794
1795	3,222,025	5,783,534,875	42.3674	12.1531	0.0005571	1795
1796	3,225,616	5,793,206,336	42.3792	12.1554	0.0005568	1796
1797	3,229,209	5,802,888,573	42.3910	12.1576	0.0005565	1797
1798	3,232,804	5,812,581,592	42.4028	12.1599	0.0005562	1798
1799	3,236,401	5,822,285,399	42.4146	12.1622	0.0005559	1799
1800	3,240,000	5,832,000,000	42.4264	12.1644	0.0005556	1800
1000	3,240,000	3,332,000,000	42.4204	12.1044	3.0003330	1000

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1801	3,243,601	5,841,725,401	42.4382	12.1637	0.0005552	1801
1802	3,247,204	5,851,461,608	42.4500	12.1689	0.0005549	1802
1803	3,250,809	5,861,208,627	42.4617	12.1712	0.0005546	1803
1804	3,254,416	5,870,966,464	42.4735	12.1734	0.0005543	1804
1805	3,258,025	5,880,735,125	42.4853	12.1757	0.0005540	1805
1805	3,261,636	5,890,514,616	42.4971	12.1779	0.0005537	1806
1807	3,265,249	5,900,304,943	42.5088	12.1802	0.0005534	1807
1808	3,268,864	5,910,106,112	42.5205	12.1824	0.0005531	1808
1809	3,272,481	5,919,918,129	42.5323	12.1846	0.0005528	1809
1810	3,276,100	5,929,741,000	42.5441	12.1869	0.0005525	1310
1811	3,279,721	5,939,574,731	42.5558	12.1891	0.0005522	1811
1812	3,283,344	5,949,419,328	42.5676	12.1914	0.0005519	1812
1813	3,286,969	5,959,274,797	42.5793	12.1936	0.0005516	1813
1814	3,290,596	5,969,141,144	42.5911	12.1959	0.0005513	1814
1815	3,294,225	5,979,018,375	42.6028	12.1981	0.0005510	1815
1816	3,297,856	5,988,906,496	42.6146	12.2003	0.0005507	1816
1817	3,301,489	5,998,805,513	42.6263	12.2026	0.0005504	1817
1818	3,305,124	6,008,715,432	42.6380	12.2048	0.0005501	1818
1819	3,308,761	6,018,636,259	42.6497	12.2071	0.0005498	1819
1820	3,312,400	6,028,568,000	42.6615	12.2093	0.0005495	1820
1821	3,316,041	6,038,510,661	42.6732	12.2115	0.0005491	1821
1822	3,319,684	6,048,464,248	42.6849	12.2138	0.0005488	1822
1823	3,323,329	6,058,428,767	42.6966	12.2160	0.0005485	1823
1824	3,326,976	6,068,404,224	42.7083	12.2182	0.0005482	1824
1825	3,330,625	6,078,390,625	42.7200	12.2205	0.0005479	1825
1826	3,334,276	6,088,387,976	42.7317	12.2227	0.0005476	1826
1827	3,337,929	6,098,396,283	42.7434	12.2249	0.0005473	1827
1828	3,341,584	6,108,415,552	42.7551	12.2272	0.0005470	1828
1829	3,345,241	6,118,445,789	42.7668	12.2291	0.0005467	1829
1830	3,348,900	6,128,487,000	42.7785	12.2316	0.0005464	1830
1831	3,352,561	6,138,539,191	42.7902	12.2338	0.0005461	1831
1832	3,356,224	6,148,602,368	42.8019	12.2361	0.0005459	1832
1833	3,359,889	6,158,676,537	42.8135	12.2383	0.0005456	1833
1834	3,363,556	6,168,761,704	42.8252	12.2405	0.0005453	1834
1835	3,367,225	6,178,857,875	42.8369	12.2427	0.0005450	1835
1836	3,370,896	6,188,965,056	42.8486	12.2450	0.0005447	1836
1837	3,374,569	6,199,083,253	42.8602	12.2472	0.0005414	1837
1838	3,378,244	6,209,212,472	42.8719	12.2494	0.0005441	1838
1839	3,381,921	6,219,352,719	42.8836	12.2516	0.0005438	1839
1840	3,385,600	6,229,504,000	42.8952	12.2539	0.0005435	1840
1841	3,389,281	6,239,666,321	42.9069	12.2561	0.0005432	1841
1842	3,392,964	6,249,839,688	42.9185	12.2583	0.0005429	1842
1843	3,396,649	6,260,024,107	42.9302	12.2605	0.0005426	1843
1844	3,400,336	6,270,219,584	42.9418	12.2627	0.0005423	1844
1845	3,404,025	6,280,426,125	42.9535	12.2649	0.0005420	1845
1846	3,407,716	6,290,643,736	42.9651	12.2672	0.0005417	1846
1847	3,411,409	6,300,872,423	42.9767	12.2694	0.0005414	1847
1848	3,415,104	6,311,112,192	42.9884	12.2716	0.0005411	1848
1849	3,418,801	6,321,363,049	43.0000	12.2738	0.0005408	1849
1850	3,422,500	6,331,625,000	43.0116	12.2760	0.0005405	1850
<u> </u>	3., 1,	,00 , 0, 0,			5. 5	

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1851	3,426,201	6,341,898,051	43.0232	12.2782	0.0005402	1851
1852	3,429,904	6,352,182,208	43.0349	12.2804	0.0005400	1852
1853	3,433,609	6,362,477,477	43.0465	12.2826	0.0005397	1853
1854	3,437,316	6,372,783,864	43.0581	12.2849	0.0005394	1854
1855	3,441,025	6,383,101,375	43.0697	12.2871	0.0005391	1855
1856	3,444,736	6,393,430,016	43.0813	12.2893	0.0005388	1856
1857	3,448,449	6,403,769,793	43.0929	12.2915	0.0005385	1857
1858	3,452,164	6,414,120,712	43.1045	12.2937	0.0005382	1858
1859	3,455,881	6,424,432,779	43.1161	12.2959	0.0005379	1859
1860	3,459,600	6,434,856,000	43.1277	12.2981	0.0005376	1860
1831	3,463,321	6,445,240,381	43.1393	12.3003	0.0005373	1861
1862	3,467,044	6,455,635,928	43.1509	12.3025	0.0005371	1862
1863	3,470,769	6,466,042,647	43.1625	12.3047	o.∞o5368	1863
1854	3,474,496	6,476,460,544	43.1741	12.3069	0.0005365	1864
1865	3,478,225	6,486,889,625	43.1856	12.3091	0.0005362	1865
1866	3,481,956	6,497,329,896	43.1972	12.3113	0.0005359	1866
1867	3,485,689	6,507,781,363	43.2088	12.3135	0.0005356	1867
1868	3,489,424	6,518,244,032	43.2204	12.3157	0.0005353	1868
1869	3,493,161	6,528,717,909	43.2319	12.3179	0.0005350	1869
1870	3,496,900	6,539,203,000	43.2435	12.3201	0.0005348	1870
1871	3,500,641	6,549,699,311	43.2551	12.3223	0.0005345	1871
1872	3,504,384	6,560,206,848	43.2666	12.3245	0.0005342	1872
1873	3,508,129	6,570,725,617	43.2782	12.3267	0.0005339	1873
1874	3,511,876	6,581,255,624	43.2897	12.3289	0.0005336	1874
1875	3,515,625	6,591,796,875	43.3013	12.331	0.0005333	1875
1876	3,519,376	6,602,349,376	43.3128	12.3333	0.0005330	1876
1877	3,523,129	6,612,913,133	43.3244	12.3354	0.0005328	1877
1878	3,526,884	6,623,488,152	43.3359	12.3376	0.0005325	1878
1879	3,530,641	6,634,074,439	43.3474	12.3398	0.0005322	1879
1880	3,534,400	6,644,672,000	43 - 3590	12.3420	0.0005319	1880
1881	3,538,161	6,655,280,841	43.3705	12.3442	0.0005316	1881
1882	3,541,924	6,665,9∞,968	43.3820	12.3464	0.0005313	1882
1883	3,545,689	6,676,532,387	43.3935	12.3486	0.0005311	1883
1884	3,549,456	6,687,175,104	43.4051	12.3508	0.0005308	1884
1885	3,553,225	6,697,829,125	43.4166	12.3529	0.0005305	1885
1886	3,556,996	6,708,494,456	43.4281	12.3551	0.0005302	1886
1887	3,560,769	6,719,171,103	43.4396	12.3573	0.0005299	1837
1883	3,564,544	6,729,859,072	43.4511	12.3595	0.0005297	1838
1889	3,568,321	6,740,558,369	43.4626	12.3617	0.0005294	1889
1890	3,572,100	6,751,269,000	43.4741	12.3639	0.0005291	1890
1891	3,575,881	6,761,990,971	43.4856	12.3660	0.0005288	1891
1892	3,579,664	6,772,724,288	43.4971	12.3682	0.0005285	1892
1893	3,583,449	6,783,468,957	43.5086	12.3704	0.0005283	1893
1894	3,587,236	6,794,224,984	43.5201	12.3726	0.0005280	1894
1895	3,591,025	6,804,992,375	43.5316	12.3747	0.0005277	1895
1896	3,594,816	6,815,771,136	43.5431	12.3769	0.0005274	1896
1897	3,598,609	6,826,561,273	43.5546	12.3791	0.0005271	1897
1898	3,602,404	6,837,362,792	43.5660	12.3813	0.0005269	1898
1899	3,606,201	6,848,175,699	43.5775	12.3835 12.3856	0.0005266 0.0005263	1899
1900	3,610,000	6,859,000,000	43.5890	12.3030	0.005203	1900

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1901	3,613,801	6,869,835,701	43.6005	12.3878	0.0005260	1901
1902	3,617,604	6,880,682,808	43.6119	12.3900	0.0005258	1902
1903	3,621,409	6,891,541,327	43.6234	12.3921	0.0005255	1903
1904	3,625,216	6,902,411,264	43.6348	12.3943	0.0005252	1904
1905	3,629,025	6,913,292,625	43.6463	12.3965	0.0005249	1905
1906	3,632,836	6,924,185,416	43.6578	12.3985	0.0005247	1906
1907	3,636,649	6,935,089,643	43.6692	12.4008	0.0005244	1907
1908	3,640,464	6,946,005,312	43.6807	12.4030	0.0005241	1908
1909	3,644,281	6,956,932,429	43.6921	12.4051	0.0005238	1909
1910	3,648,100	6,967,871,000	43.7035	12.4073	0.0005236	1910
1911	3,651,921	6,978,821,031	43.7150	12.4095	0.0005233	1911
1912	3,655,744	6,989,782,528	43.7264	12.4116	0.0005230	1912
1913	3,659,569	7,000,755,497	43.7379	12.4138	0.0005227	1913
1914	3,663,396	7,011,739,944	43.7493	12.4160	0.0005225	1914
1915	3,667,225	7,022,735,875	43.7607	12.4181	0.0005222	1915
1916	3,671,056	7,033,743,296	43.7721	12.4203	0.0005219	1916
1917	3,674,889	7,044,762,213	43.7836	12.4225	0.0005216	1917
1918	3,678,724	7,055,792,632	43.7950	12.4246	0.0005214	1918
1919	3,682,561	7,066,834,559	43.8064	12.4268	0.0005211	1919
1920	3,680,400	7,077,888,000	43.8178	12.4289	0.0005208	1920
1921	3,690,241	7,088,952,961	43.8292	12.4311	0.0005206	1921
1922	3,694,084	7,100,029,448	43.8406	12.4332	0.0005203	1922
1923	3,697,929	7,111,117,467	43.8520	12.4354	0.0005200	1923
1924	3,701,776	7,122,217,024	43.8634	12.4376	0.0005198	1924
1925	3,705,625	7,133,328,125	43.8748	12.4397	0.0005195	1925
1926	3,709,476	7,144,450,776	43.8862	12.4419	0.0005192	1926
1927	3,713,329	7,155,584,983	43.8976	12.4440	0.0005189	1927
1928	3,717,184	7,166,730,752	43.9090	12.4462	0.0005187	1928
1929	3,721,041	7,177,888,089	43.9204	12.4483	0.0005184	1929
1930	3,724,900	7,189.057,000	43.9318	12.4505	0.0005181	1930
1931	3,728,761	7,200,237,491	43.9431	12.4526	0.0005179	1931
1932	3,732,624	7,211,429,568	43.9545	12.4548	0.0005176	1932
1933	3,736,489	7,222,633,237	43.9659	12.4569	0.0005173	1933
1934	3,740,356	7,233,848,504	43.9773	12.4591	0.0005171	1934
1935	3,744,225	7,245,075,375	43.9886	12.4612	0.0005168	1935
1936	3,748,096	7,256,313,856	44.0000	12.4634	0.0005165	1936
1937	3,751,969	7,267,563,953	44.0114	12.4655	0.0005163	1937
1938	3,755,844	7,278,825,672	44.0227	12.4676	0.0005160	1938
1939	3,759,721	7,290,099,019	44.0341	12.4698	0.0005157	1939
1940	3,763,600	7,301,384,000	44.0451	12.4719	0.0005155	1940
1941	3,767,481	7,312,680,621	44.0568	12.4741	0.0005152	1941
1942	3,771,364	7,323,988,888	44.0081	12.4762	0.0005149	1942
1943	3,775,249	7,335,308,807	44.0795	12.4784	0.0005147	1943
1944	3,779,136	7,346,640,384	44.0908	12.4805	0.0005144	1944
1945	3,783,025	7,357,983,625	44.1022	12.4826	0.0005141	1945
1946	3,786,916	7,369,338,536	44.1135	12.4848	0.0005139	1946
1947	3,790,809	7,380,705,123	44.1248	12.4869	0.0005136	1947
1948	3,794,704	7,392,083,392	44.1362	12.4891	0.0005133	1948
1949	3,798,601	7,403,473,349	44.1475	12.4912	0.0005131	1949
1950	3,802,500	7,414,875,000	44.1588	12.4933	0.0005128	1950
						

Powers, Roots and Reciprocals

No.	Square	Cube	Sq. Root	Cube Root	Reciprocal	No.
1951	3,806,401	7,426,288,351	41.1701	12.4955	0.0005126	1951
1952	3,810,304	7,437,713,408	44.1814	12.4976	0.0005123	1952
1953	3,814,209	7,449,150,177	44.1928	12.4997	0.0005120	1953
1954	3,818,116	7,460,598,664	44.2041	12.5019	0.0005118	1954
1955	3,822,025	7,472,058,875	44.2154	12.5040	0.0005115	1955
1956	3,825,936	7,483,530,816	44.2267	12.5061	0.0005112	1956
1957	3,829,849	7,495,014,493	44.2380	12.5083	0.0005110	1957
1958	3,833,764	7,506,509,912	44.2493	12.5104	0.0005107	1958
1959	3,837,681	7,518,017,079	44.2606	12.5125	0.0005105	1959
1960	3,841,600	7,529,536,000	44.2719	12.5146	0.0005102	1960
1961	3,845,521	7,541,066,681	41.2832	12.5168	0.0005099	1961
1962	3,849,444	7,552,609,128	44.2945	12.5189	0.0005097	1962
1963	3,853,369	7,564,163,347	44.3058	12.5210	0.000509.	1963
1964	3,857,296	7,575,729,344	44.3170	12.5232	0.0005092	1964
1965	3,861,225	7,587,307,125	44.3283	12.5253	0.0005089	1965
1966	3,865,156	7,598,896,696	44.3396	12.5274	0.0005086	1966
1967	3,869,089	7,610,498,063	44.3509	12.5295	0.0005084	1967
1968	3,873,024	7,622,111,232	44.3621	12.5317	0.0005081	1968
1969	3,876,961	7,633,736,209	41.3734	12.5338	0.0005079	1969
1970	3,880,900	7,645,373,000	44.3847	12.5359	0.0005076	1970
1971	3,884,841	7,657,021,611	44.3959	12.5380	0.0005074	1971
1972	3,888,784	7,668,682,048	44.4072	12.5401	0.0005071	1972
1973	3,892,729	7,680,354,317	44.4185	12.5423	0.0005068	1973
1974	3,896,676	7,692,038,424	44.4297	12.5444	0.0005066	1974
1975	3,900,625	7,793,734,375	44.4410	12.5465	0.0005063	1975
1976	3,904,576	7,715,442,176	44.4522	12.5486	0.0005061	1976
1977	3,908,529	7,727,161,833	44.4635	12.5507	0.0005058	1977
1978	3,912,484	7,738,893,352	44.4747	12.5528	0.0005056	1978
1979	3,915,441	7,750,636,739	44.4860	12.5550	0.0005053	1979
1980	3,920,400	7,762,392,000	41.4972	12.5571	0.0005051	1980
1981	3,920,460	7,774,159,141	44.5084	12.5592	0.0005048	1981
1981	3,928,324	7,785,938,168	44.5197	12.5613	0.0005045	1981
1983	3,920,324	7,797,729,087	44.5197	12.5634	0.0005043	1983
	3,932,269	7,809,531,904	44.5309	12.5655	0.0005040	1984
1984				12.5676	0.0005048	1985
1985	3,940,225	7,821,346,625	44 - 5533	12.5697		1985
1986	3,944,196	7,833,173,256	44.5646		0.0005035	1987
1987	3,948,169	7,845,011,803	44.5758	12.5719	0.0005033	1988
1988	3,952,144	7,856,862,272	44.5870	12.5740		
1989	3,956,121	7,868,724,669	44.5982	12.5761	0.0005028	t989
1990	3,960,100	7,880,599,000	44.600,4	12.5782	0.0005025	1990
1991	3,964,081	7,892,485,271	44.6206	12.5803	0.0005023	1991
1992	3,968,064	7,904,383,488	44.6318		- 1	1992
1993	3,972,049	7,916,293,657	44.6430	12.5845	0.0005018	
1994	3,976,036	7,928,215,784	44.6542		0.0005015	1994
1995	3,980,025	7,940,149,875	44.6654	12.5887	0.0005013	1995
1996	3,984,016	7,952,095,936	44.6766	12.5908	0.0005010	1996
1997	3,988,009	7,964,053,973	44.6878	12.5929	0.0005008	1997
1998	3,992,004	7,976,023,992	44.6990	12.5950	0.0005005	1998
1999	3,996,001	7,988,005,999	44.7102	12.5971	0.0005003	1999
2000	4,000,000	8,000,000,000.	44.7214	12.5992	0.0005000	2000

Squares of Mixed Numbers from 1/64 to 12, by 64ths

I. Squares of Mixed Numbers from 1/64 to 6

	0	I	2	3	4	5
1/64 1/32	0.00024	1.03149	4.06274	9.09399 9.18848	16.12524 16.25098	25.15649
	0.00098		4.12598			25.31348
364	0.00220	1.09595	4.18970	9.28345	16.37720	25.47095
1/16	0.00391	1.12891	4.25391	9.37891	16.50391	25.62891
%1	0.00610	1.16235	4.31860	9.47485	16.63110	25.78735
8/32	0.00879	1.19629	4.38379	9.57129	16.75879	25.94629
764	0.01196	1.23071	4.44946	9.65821	16.83596	26.10571
3/8	0.01562	1.26562	4.51562	9.76562	17.01562	26.26562
9/64	0.01978	1.30103	4.58228	9.85353	17.14478	26.42603
5/32	0.02441	1.33691	4.64941	9.96191	17.27441	26.58691
11/61	0.02954	1.37329	4.71704	10.06079	17.40454	26.74829
916	0.03516	1.41016	4.78516	10.16016	17.53516	26.91016
13/64	0.04126	1.44751	4.85376	10.26001	17.66626	27.07251
7/32	0.04785	1.48535	4.92285	10.36035	17.79785	27.23535
15/64	0.05493	1.52368	4.99243	10.46118	17.92993	27.39868
34	0.06250	1.56250	5.06250	10.56250	18.06250	27.56250
17/64	0.07056	1.60181	5.13306	10.66431	13.19556	27.72681
9/32	0.07910	1.64160	5.20410	10.76660	18.32910	27.89160
19/64	0.08813	1.68188	5.27563	10.86938	18.46313	28.05688
5,16	0.09766	1.72266	5.34766	10.97266	18.59766	28.22266
21/64	0.10767	1.76392	5.42017	11.07642	18.73267	28.38892
11/32	0.11816	1.80566	5.49316	11.18066	18.86816	28.55566
2364	0.12915	1.84790	5.56663	11.28540	19.00415	28.72290
3/8	0.14062	1.89062	5.64062	11.39062	19.14062	28.89062
25/64	0.15259	1.93384	5.71509	11.49634	19.27759	29.05884
1382	0.16504	1.97754	5.79004	11.60254	19.41504	29.22754
27/84	0.17798	2.02173	5.85548	11.70923	19.55298	29.39673
7/16	0.19141	2.06641	5.94141	11.81641	19.69141	29.56641
28/64	0.20532	2.11157	6.01782	11.92407	19.83032	29.73657
15/32	0.21973	2.15723	6.09473	12.03223	19.96973	29.90723
31/64	0.23462	2.20337	6.17212	12.14087	20.10962	30.07837
1/2	0.25000	2.25000	6.25000	12.25000	20.25000	30.25000
8364	0.26587	2.29712	6.32837	12.35962	20.39087	30.42212
17,32	0.28223	2.34473	6.40723	12.46973	20.53223	30.59473
8504	0.29907	2.39282	6.48657	12.58032	20.67407	30.76782
918	0.31641	2.44141	6.56641	12.69141	20.81641	30.94141
37,64	0.33423	2.49048	6.64673	12.80298	20.95923	31.11548
1932	0.35254	2.54004	6.72751	12.91504	21.10254	31.29004
8964	0.37134	2.59009	6.80884	13.02759	21.24634	31.46509
54	0.39062	2.64052	6.89052	13.14062	21.39062	31.64062
4364	0.41040	2.69165	6.97290	13.25415	21.53540	31.81665
21,32	0.43066	2.74316	7.05566	13.36816	21.68066	31.99316
	1		' ' '	l		

The tables of squares of mixed numbers from $\frac{1}{64}$ to 12 are arranged in as compact a manner as possible, and a few words may be necessary to explain their use. Assume, for example, that the square of 8564 is required; 8 is located at the

Squares of Mixed Numbers from 1/04 to 6 (Continued)

II. Squares of Mixed Numbers from 61/04 to 12

	6	7	8	9	10	11
164 1 152 964 150 964 153 2764 164 964 552 1 164 950	36.18774 36.37598 36.56470 36.75391 36.94360 37.13379 37.32446 37.51562 37.70728 37.89941 38.09204 38.28516	49.21899 49.43848 49.65845 49.87891 50.09985 50.32129 50.76562 50.98853 51.21191 51.43579 51.66016	64. 25024 64. 50098 64. 75220 65. 00391 65. 25610 65. 50879 66. 01562 66. 26978 66. 52441 66. 77954 67. 03516	81.28149 81.56348 81.84595 82.12891 82.41235 82.69629 83.26562 83.55103 83.83691 84.12329	100.31274 100.62598 100.93970 101.25391 101.56860 101.88379 102.19946 102.51562 102.83228 103.14941 103.46704 103.78516	121.34399 121.68848 122.03345 122.37891 122.72485 123.07129 123.44821 123.76562 124.11353 124.81079 124.81079 125.16016
13%4 7/42 15/64 1/4	38.47876 38.67285 38.86743 39.06250	51.88501 52.11035 52.33618 52.56250	67.29126 67.54785 67.80493 68.06250	84.69751 84.98535 85.27368 85.56250	104.10376 104.42285 104.74243 105.06250	125.51001 125.86035 126.21110 126.56250

top of its column, and $\%_4$ in the left-hand column. The square is then found to equal 65.25610. In the same way, the square of $3\%_6$ is found to equal 10.16016.

Squares of Mixed Numbers from 61/64 to 12 (Continued)

	6	7	8	9	10	11
17,64	39.25806	52.78931	68.32056	85.85181	105.38306	126.91431
9/32	39.45410	53.01660	68.57910	86.14160	105.70410	127.26660
19/64	39.65063	53.24438	68.83813	86.43188	106.02563	127.61938
5í6	39.84766	53.47266	69.09766	86.72266	106.34766	127.97266
21/64	40.04517	53.70142	69.35767	87.01392	106.67017	128.32642
11/32	40.24316	53.93066	69.61816	87.30566	106.99316	128.68066
23/64	40.44165	54.16040	69.87915	87.59790	107.31665	129.03540
9á	40.64062	54.39062	70.14062	87.89062	107.64062	129.39062
25/64	40.84009	54.62134	70.40259	88.18384	107.96509	129.74634
13/32	41.04004	54.85254	70.66504	88.47754	108.29004	130.10254
27/84	41.24048	55.08423	70.92798	88.77173	108.61548	130.45923
7/16	41.44141	55.31641	71.19141	89.06641	108.94141	130.81641
29/64	41.64282	55.54907	71.45532	89.36157	109.26782	131.17407
15/32	41.84473	55.78223	71.71973	89.65723	109.59473	131.53223
31/61	42.04712	56.01587	71.98462	89.95337	109.92212	131.89087
3/2	42.25000	56.25000	72.25000	90.25000	110.25000	132.25000
33/64	42.45337	56.48462	72.51587	90.54712	110.57837	132.60962
17/32	42.65723	56.71973	72.78223	90.84473	110.90723	132.96973
35/64	42.86157	56.95532	73.04907	91.14282	111.23657	133.33032
946	43.05641	57.19141	73.31641	91.44141	111.56641	133.69141
37/64	43.27173	57.42798	73.58423	91.74048	111.89673	134.05298
1952	43.47754	57.66504	73.85254	92.04004	112.22754	134.41504
89/84	43.68384	57.90259	74.12134	92.34009	112.55884	134.77759
5/8	43.89062	58.14062	74.39062	92.64062	112.89062	135.14062
41/64	44.09790	58.37915	74.66040	92.94165	113.22290	135.50415
21/32	44.30566	58.61816	74.93066	93.24316	113.55566	135.86816
43/64	44.51392	58.85767	75.20142	93.54517	113.88892	136.23267
11/16	44.72266	59.09766	75.47266	93.84766	114.22266	136.59766
4504	44.93188	59.33813	75.74438	94.15063	114.55688	136.96313
27,32	45.14160	59.57910	76.01660	94.45410	114.89160	137.32910
47/04	45.35181	59.82056	76.28931	94.75806	115. 22681	137.69556
3/4	45.56250	60.06250	76.56250	95.06250	115.56250	138.06250
49/04	45.77368	60.30493	76.83618	95.36743	115.89858	138.42993
25/32	45.98535	60.54785	77.11035	95.67285	116.23535	138.79785
51/64	46.19751	60.79126	77.38501	95.97876	116.57251	139.16626
13/16	46.41016	61.03516	77.66016	96.28516	116.91016	139.53516
5361	46.62329	61.27954	77-93579	95.59204	117.24829	139.90454
27/82	46.83691	61.52441	78.21191	96.89941	117.58691	140.27441
5561	47.05103	61.76978	78.48853	97.20728	117.92603	140.64478
7,5	47.26562	62.01562	78.76562	97.51562	118.26562	141.01562
-5764	47.48071	62.26196	79.04321	97.82446	118.60571	141.38696
29/32	47.69629	62.50879	79.32129	98.13379	118.94629	141.75879
5964	47.91235	62.75610	79.59985	98.44360	119.28735	142.13110
15/16	48.12891	63.∞391	79.87891	98.75391	119.62891	142.50391
61/64	48.34595	63.25220	80.15845	99.06470	119.97095	142.87720
81/32	48.56348	63.50098	80.43848	99.37598	120.31348	143.25098
03/64	48.78149	63.75024	80.71899	99.68774	120.65649	143.62524
				1		

Squares and Cubes of Numbers from 1/42 to 100
Advancing by 32nds to 2; from 2 to 10 by 16ths; from 10 to 100 by 8ths

No.	Square	Cube	No.	Square	Cube	No.	Square	Cube
352	o.coco976	0.0003I	1 ¹⁷ / ₃₂ 9/16 19/32 5/8	2.344727	3.590363	4	16.0000	64.0000
352	o.coc3906	0.000244		2.441406	3.814697	1/16	16.5039	67.0471
352	o.coc8789	0.000824		2.540039	4.048187	1/8	17.0156	70.1895
38	o.co15625	0.001953		2.640625	4.291016	3/16	17.5352	73.4285
5/32	0.024414	o.003\$15	21/32	2.743164	4.543365	14	18.0625	76.7656
3/16	0.035156	o.006592	11/16	2.847656	4.805419	5/16	18.5977	80.2024
7/32	0.047852	o.010468	23/32	2.954102	5.077362	3/8	19.1406	83.7402
1/4	0.062500	o.015625	3/4	3.062500	5.359375	7/16	19.6914	87.3806
952	0.079102	0.022247	2552	3.172852	5.651642	1/2	20.2500	91.1250
516	0.097656	0.030518	1316	3.285156	5.954346	9/16	20.8164	94.9749
1152	0.118164	0.040619	2752	3.399414	6.267660	5/8	21.3906	98.9316
38	0.140625	0.052734	76	3.515625	6.591797	11/16	21.9727	102.9968
1332	o.165039	0.067047	2932	3.633789	6.926910	34	22.5625	107.1719
716	o.191406	0.083740	1516	3.753906	7.273193	1316	23.1602	111.4583
1532	o.219727	0.102997	3132	3.875977	7.630828	76	23.7656	115.8574
12	o.250000	0.125000	2	4.00000	8.0000	1516	24.3789	120.3708
17/32	0.282227	0.149933	1/32	4.12598	8.38089	5	25.0000	125.000
9/16	0.316406	0.177979	1/16	4.25391	8.77368	1/16	25.62\$9	129.7463
19/32	0.352539	0.209320	1/8	4.51563	9.59570	1/8	26.2656	134.6113
5/8	0.390625	0.244141	3/16	4.78516	10.46754	3/16	25.9102	139.5964
21/32	0.430664	0.282623	14	5.06250	11.39063	1/4	27.5625	144.7031
11/16	0.472656	0.324951	516	5.34766	12.36646	5/16	28.2227	149.9329
23/32	0.516602	0.371307	58	5.64063	13.39648	3/8	28.8906	155.2871
34	0.562500	0.421875	716	5.94141	14.48218	7/16	29.5664	160.7673
25/32 13/16 27/32 7/8	0.610352 0.660156 0.711914 0.765625	o.476837 o.536377 o.600678 o.669922	916 56 1116	6.25000 6.56641 6.89063 7.22266	15.62500 16.82642 18.08789 19.41089	916 916 1116	30.2500 30.9414 31.6406 32.3477	166.3750 172.1116 177.9785 183.9773
29/32 15/16 31/32	o.821289 o.878906 o.938477 I.000000	0.744293 0.823975 0.909149 1.000000	3/4 13/16 7/8 15/16	7.56250 7.91016 8.26563 8.62891	20.79688 22.24731 23.76367 25.34741	34 13/16 7/6 15/16	33.0625 33.7852 34.5156 35.2539	190.1094 196.3762 202.7793 209.3201
1/32	1.063477	1.096800	3	9.0000	27.00000	6	36.0000	216.0000
1/16	1.128906	1.199463	1/16	9.37891	28.72290	116	36.7539	222.8206
3/32	1.196289	1.308441	1/8	9.76563	30.51758	18	37.5156	229.7832
1/8	1.265625	1.423828	3/16	10.16016	32.38550	316	38.2852	236.8894
5/32	1.336914	1.545 ⁸ 07	3/4	10.56250	34.32813	14	39.0625	244.1406
3/16	1.410156	1.674561	5/16	10.97266	36.34692	516	39.8477	251.5383
7/32	1.485352	1.810272	3/8	11.39063	38.44336	36	40.6406	259.0840
3/4	1.562500	1.953125	7/16	11.81641	40.61889	716	41.4414	266.7791
9/32	1.641602	2.103302	16	12.25000	42.87500	1/2	42.2500	274.6250
5/16	1.722656	2.260986	916	12.69141	45.21313	9/16	43.0664	282.6233
11/32	1.805664	2.426361	58	13.14063	47.63477	5/8	43.8906	290.7754
3/8	1.890625	2.599609	1116	13.59766	50.14135	11/16	44.7227	299.0828
13/32	1.977539	2.780914	3/4	14.06250	52.73438	3/4	45.5625	307.5469
7/16	2.066406	2.970459	13/16	14.53516	55.41528	13/16	46.4102	316.1692
15/32	2.157227	3.168927	7/8	15.01563	58.18555	7/8	47.2656	324.9512
1/2	2.250000	3.375000	15/16	15.50391	61.04663	15/16	48.1289	333.8943

Squares and Cubes of Numbers from 1/22 to 100 (Continued)

No.	Square	Cube	No.	Square	Cube	No.	Square	Cube
7	49.0000	343.0000	10	100.0000	1000.0000	16	256.0000	4096.000
1/6	49.8789	352.2698	1/8	102.5156	1037.9707	18	260.0156	4192.752
1/8	50.7656	361.7051	1/4	105.0625	1076.8906	14	264.0625	4291.015
3/16	51.6602	371.3074	3/8	107.6406	1116.7715	38	268.1406	4390.802
14	52.5625	381.0781	1.6	110.2500	1157.6250	1.6	272.2500	4492.125
516	53.4727	391.0188	5.8	112.8906	1199.4629	5.6	276.3906	4594.994
38	54.3906	401.1309	3.4	115.5625	1242.2969	3.4	280.5625	4699.421
716	55.3164	411.4158	7.8	118.2656	1286.1387	7.8	284.7656	48c5.419
1/2	56.2500	421 .8750	11	121.0000	1331.0000	17	289.0000	4913.000
9/16	57.1914	432 .5100	1/8	123.7656	1376.8926	18	293.2656	5022.173
5/8	58.1406	443 .3223	1/4	126.5625	1423.8281	14	297.5625	5132.953
11/16	59.0977	454 .3132	3/8	129.3906	1471.8184	38	301.8966	5245.349
34	60.0625	465.4844	1/2	132.2500	1520.8750	1/2	306.2500	5359.375
1316	61.0352	476.8372	5/8	135.1406	1571.0098	5/8	310.6406	5475.041
78	62.0156	488.3730	3/4	138.0625	1622.2344	3/4	315.0625	5592.359
1516	63.0039	500.0935	7/8	141.0156	1674.5605	7/8	319.5156	5711.341
8	64.000	512.0000	12	144.0000	1728.000	18	324.0000	5832.000
1/16	65.0039	524.0940	1/8	147.0156	1782.5645	14	328.5156	5954.345
1/8	66.0156	536.3770	1/4	150.0625	1838.2656	14	333.0625	6078.390
3/16	67.0352	548.8503	3/8	153.1406	1895.1152	36	337.6406	6204.146
1/4	68.0625	561.5156	1/2	156.2500	1953.1250	1/2	342.2500	6331.625
5/16	69.0977	574.3743	5/8	159.3906	2012.3006	5/8	346.8906	6460.837
3/8	70.1406	587.4277	3/4	162.5625	2072.6719	3/4	351.5625	6591.796
3/16	71.1914	600.6775	7/8	165.7656	2134.2324	7/8	356.2656	6724.513
1/2	72.2500	614.1250	13	169.0000	2197.0000	19	361.0000	6859.000
916	73.3164	627.7717	14	172.2656	2260.9863	16	365.7656	6995.267
5/6	74.3906	641.6191	14	175.5625	2326.2031	14	370.5625	7133.328
11/16	75.4727	655.6687	38	178.8906	2392.6621	38	375.3006	7273.193
34	76.5625	669.9219	1/2	182.2500	2460.3750	14	380 2500	7414.875
13/16	77.6602	684.3801	5/8	185.6406	2529.3535	58	385.1406	7558.384
76	78.7656	699.0449	3/4	189.0625	2599.6094	34	390.0625	7703.734
15/16	79.8789	713.9177	7/8	192.5156	2671.1543	76	395.0156	7850.935
9	81.0000	729.0000	14	196.0000	2744.0000	20	400.0000	8000.000
16	82.1289	744.2932	18	199.5156	2818.1582	1/8	405 0156	8150 939
16	83.2656	759.7988	14	203.0625	2893.6406	1/4	410 0625	8303.765
316	84.4102	775.5183	38	206.6406	2970.4590	3/8	415.1406	8458.490
1/4	85.5625	791.4531	1/2	210.2500	3048.6250	1/2	420.2500	8615.125
5/16	86.7227	807.6047	5/8	213.8906	3128.1504	5/8	425.3906	8773.681
3/8	87.8906	823.9746	3/4	217.5625	3209.0469	3/4	430.5625	8934.171
3/16	89.0664	840.5642	7/8	221.2656	3291.3262	7/8	435.7656	9096.607
1/2	90.2500	857.3750	15	225.0000	3375.0000	2I	441.0000	9261.000
9/16	91.4414	874.4084	1/8	228.7656	3460.0801	16	446.2656	9427.361
5/8	92.6406	891.6660	1/4	232.5625	3546.5781	14	451.5625	9595.703
11/16	93.8477	909.1492	3/8	236.3906	3634.5059	36	456.8906	9766.037
34	95.0625	926.8594	1/2	240.2500	3723.8750	1/5	462.2500	9,938.375
13/16	96.2852	944.7981	5/6	244.1406	3814.6973	5/8	467.6406	10.112.728
7/6	97.5156	962.9668	3/4	248.0625	3906.9844	3/4	473.0625	10.289.109
15/16	98.7539	981.3669	7/8	252.0156	4000.7480	7/8	478.5156	10,467.529
			I		1	1		

Squares and Cubes of Numbers from 1/32 to 100 (Continued)

No.	Square	Cube	No.	Square	Cube	No.	Square	Cube
22	484.0000	10,648.000	28	784.000	21,952.000	34	1156.000	39 304.000
1/8	489.5156	10,830.533	1/8	791.015	22,247.314	1/8	1164.515	39 739.095
1/4	495.0525	11,015.140	1/4	798.062	22,545.265	1/4	1173.062	40,177.390
3/8	500.6406	11,201.834	3/8	805.140	22,845.865	3/8	1181.640	40,618.896
12	506.2500	11,390.625	16	812.250	23,149.125	16	1190.250	41,063.625
58	511.8906	11,581.525	56	819.390	23,455.056	58	1198.890	41,511.587
34	517.5625	11,774.546	34	826.562	23,763.671	34	1207.562	41,962.796
78	523.2656	11,969.701	78	833.765	24,074.982	78	1216.265	42,417.263
23	529.0000	12,167.000	29	841.000	24,389.000	35	1225.000	42,875.coo
18	534.7656	12,366.455	16	848.265	24,705.736	16	1233.765	43,336.017
14	540.5625	12,568.078	14	855.562	25,025.203	14	1242.562	43,800.328
38	546.3906	12,771.880	36	862.890	25,347.412	38	1251.390	44,267.943
1/2	552.2500	12,977.875	1/2	870.250	25,672.375	1/2	1260.250	44,738.875
5/8	558.1406	13,186.072	5/8	877.640	26,000.103	5/8	1269.140	45,213.134
3/4	564.0625	13,396.484	3/4	885.062	26,330.609	3/4	1278.062	45,690.734
7/8	570.0156	13,609.123	7/8	892.515	26,663.904	7/8	1287.015	46,171.685
24	576.0000	13,824.000	30	900.000	27,000.000	36	1296.000	46,656.000
18	582.0156	14,041.127	1/8	907.515	27,338 908	1/8	1305.015	47,143.689
14	588.0625	14.260.515	1/4	915.062	27,680.640	1/4	1314.062	47,634.765
38	594.1406	14,482.177	3/8	922.640	28,025.209	3/8	1323.140	48,129.240
1/2	600.2500	14.706.125	1.6	930 · 250	28,372.625	14	1332.250	48,627.125
5/8	606.3906	14.932.369	5.6	937 · 890	28,722.900	56	1341 390	49,128.431
3/4	612.5625	15.160.921	3.4	945 · 562	29,076.046	34	1350.562	49,633.171
7/8	618.7656	15,391.794	7.8	953 · 265	29,432.076	76	1359.765	50,141.357
25	625.0000	15,625.000	31	961.000	29,791.000	37	1369.000	50,653.000
1/8	631.2656	15,860.548	18	968.765	30,152.830	16	1378.265	51,168.111
1/4	637.5625	16,098.453	14	976 562	30,517.578	14	1387.562	51,686.703
3/8	643.8906	16,338.724	38	984.390	30,885.255	38	1396.890	52,208.787
12	650.2500	16,581.375	1.5	992.250	31,255.875	15	1406.250	52,734 · 375
58	656.6406	16,826.416	5.8	1000.140	31,629.447	58	1415.640	53,263 · 478
34	663.0625	17,073.859	3.4	1008.062	32,05.984	34	1425.062	53,796 · 109
78	669.5156	17,323.716	7.8	1016.015	32,385.498	78	1434.515	54 · 332 · 279
26	676.0000	17,576.000	32	1024.000	32,768.000	38	1444 000	54,872.000
1/8	682.5156	17,830.720	1/8	1032.015	33,153.502	1/8	1453 515	55,415.283
1/4	689.0625	18,087.890	1/4	1040.062	33.542.015	1/4	1463 062	55,962.140
3/8	695.6406	18,347.521	3/8	1048.140	33.933.552	3/8	1472 640	56,512.584
1/2	702.2500	18,609.625	1/2	1056.250	34.328.125	12	1482.250	57,066.625
5/8	708.8906	18,874.212	5/8	1064.390	34.725.744	58	1491.890	57,624.275
3/4	715.5625	19,141.296	3/4	1072.562	35.126.421	84	1501.562	58,185.546
7/8	722.2656	19,410.888	7/8	1080.765	35.530.169	78	1511.265	58,750.451
27	729 0000	19.683.000	33	1089.000	35.937.000	39	1521.000	59,319.000
18	735 7556	19.957.642	18	1097.265	36,346.923	1/8	1530.765	59,891.205
14	742 5625	20.234.828	14	1105.562	36.759.953	1/4	1540.562	60,467.078
38	749 3906	20,514.568	38	1113.890	37,176.099	3/8	1550.390	61,046.630
34 34 38	755.2500 763.1406 770.0625 777.0156	20.796.875 21.081.759 21,369.234 21,659.310	12 56 34 78	1122.250 1130.640 1139.062 1147.515	37.595.375 38,017.791 38.443.359 38,872.091	1/3 5/8 3/4 7/8	1560.250 1570.140 1580.062 1590.015	61,629.875 62,216.822 62,807.484 63,401.873

Squares and Cubes of Numbers from 1/22 to 100 (Continued)

No.	Square	Cube	No.	Square	Cube	No.	Square	Cube
40 18 11 38	1600.000 1610.015 1620.062 1630.140	64,000.000 64,601.877 65,207.516 65,816.928	38 34	2116 000 2127.515 2139.002 2150.640	97,336 ∞ 98,131.65 98,931.64 99,735.95	52 16 14 38	2704 000 2717 c15 2730 002 2743 140	141,624.43
15	1640.250	66,430.125	14	2162.250	100,544.62	12	2756 250	145.739.18
58	1650.390	67,047.119	58	2173.890	101,357.65	58	2769 390	
34	1660.562	67,667.922	34	2185.562	102,175.04	34	2782 562	
78	1670.765	68,292.545	78	2197.265	102,996.82	78	2795 765	
41	1681.000	68,921.000	47	2209.000	103,823 00	53	2809.000	148,877.00
38	1691.265	69,553.299	18	2220.765	104,653 58	16	2822.265	149,932.86
34	1701.562	70,189.453	14	2232.562	105,488.57	14	2835.562	150,993.70
38	1711.890	70,829.475	38	2244.390	106,328.00	36	2848.890	152,059.53
14	1722.250	71,473.375	12	2256.250	107,171.87	1.6	2862.250	153,130.37
56	1732.640	72,121.166	58	2268.140	103,020.19	5.8	2875.640	154,206.22
34	1743.062	72,772.859	34	2280.062	103,872.93	3.4	2889.062	155,287.10
78	1753.515	73,428.467	78	2292 015	109,730.24	7.8	2902.515	156,373.02
42 16 14 38	1764.000 1774.515 1785.062 1795.640	74,088.000 74,751.471 75,418.891 76,090.271	48 14 14 38	2316.015 2328.062	110,592 00 111,458.25 112,329 01 113,204.30	54 14 38	2916 000 2929.515 2943.062 2956.640	157,464.00 158,560.03 159,661.14 160,767.33
12	1806.250	76,765.625	15	2352.250	114 084 12	78	2970 250	161,878.62
58	1816.890	77,444.963	56	2364.390	114,968.49		2983 890	162,995.02
34	1827.562	78,128.297	34	2376.562	115,857.42		2997 562	164.116.54
78	1838.265	78,815.639	76	2388.765	116,750.92		3011 265	165,243.20
43	1849.000	79,507.000	49	2401-000	117,649.00	55	3025.000	166,375.00
18	1859.765	80,202.393	34	2413.265	118,551.67	18	3038.765	167,511.95
14	1870.562	80,901.828	34	2425.562	119,458.95	14	3052.562	168,654.07
38	1881.390	81,605.318	38	2437.890	120,370.85	38	3066.390	169,801.38
14 58 34 78	1892.250 1903-140 1914-062 1925-015	82,312.875 83,024.510 83,740.234 84,460.061	34 34 78	2450 . 250 2462 . 640 2475 . 062 2487 . 515	121,287.37 122,208.54 123,134.35 124,064.84	32 58 34 78	3080.250 3094.140 3108.062 3122 015	170.953.87 172.111.57 173.274.48 174.442.62
44 18 14 38	1935.000 1947-015 1958.062 1969.140	85,184.000 85,912.064 86,644.266 87,380.615	50 16 14 38	2500 000 2512.515 2525 002 2537.640	125,000 00 125,939 84 126,884 39 127,833 64	56 14 38	3136.000 3150 015 3164-062 3178.140	175,616.00 176,794.62 177,978.51 179,167.67
32	1980 250	88,121.125	12	2550.250	128,787.62	1/2	3192 250	180,362 12
58	1991 390	88,865.807	55	2562.890	129,746.33	58	3206 390	181,561 86
34	2002 562	89,614.672	34	2575.562	130,709.79	34	3220 562	182,766 92
78	2013 765	90,367.732	78	2588.265	131,678.01	78	3234 765	183,977 29
45	2025 000	91,125 000	51	2601 000	132,651 00	57	3249 000	185,193 00
14	2036.265	91,886,486	1/8	2613.765	133,628.76	34	3263 265	186,414 04
34	2047.562	92,652 203	1/4	2626.562	134,611.32	34	3277 562	187,640-45
38	2058.890	93,422,162	3/8	2639.390	135,598.69	38	3291 890	188,872.22
1/2	2070.250	94,196.375	14	2652.250	136,590.87	16	330f. 250	190,109.37
5/8	2081.640	94,974.854	56	2665.140	137,587.88	58	3320 640	191,351.91
3/4	2093.062	95,757.609	34	2678.062	138,589.73	34	3335 062	192,599.85
7/8	2104.515	96,544.654	78	2691.015	139,596.43	78	3349 515	193,853.21

Squares and Cubes of Numbers from 1/32 to 100 (Continued)

No.	Square	Cube	No.	Square	Cube	No.	Square	Cube
58	3364 000	195,112.00	64	4096.000	262,144.00	70	4900.000	343 000 00
1,6	3373.515	196,376.22	36	4112.015	263,683.00	18	4917.515	344,840 78
1,4	3393.062	197,645.89	34	4128.062	265,228.01	14	4935.062	346,688 14
3,8	3407.640	198,921.02	36	4144.140	266,779.05	38	4952.640	348,542 08
1.2	3422.250	200 201 .62	1/2	4160.250	268,336.12	1/2	4970.250	350,402.62
5.8	3436.890	201 .487 .71	5/8	4176.390	269,899.24	5/8	4987.890	352,269.77
3.4	3451.562	202 .779 .29	3/4	4192.562	271,468.42	3/4	5005.562	354,143.54
7.8	3466.265	204 .076 .38	7/8	4208.765	273.043.67	7/8	5023.265	356,023.95
59 14 36	3481.000 3495.765 3510.562 3525.390	205.379.00 206,687.14 208,000.82 209,320.06	65 14 34 36	4225 000 4241 265 4257 562 4273 890	274.625 00 276.212.42 277,805.95 279,405.60	71 1/8 1/4 3/6	5041.000 5053.765 5076.562 5094.390	357,911.00 359,804.70 361,705.07 363,612.13
1/2	3540.250	210,644.87	16	4290.250	281,011.37	16	5112.250	365,525.87
5/8	3555.140	211,975.25	58	4306.640	282,623.29	56	5130.140	367,446.32
3/1	3570.062	213,311.23	34	4323.062	284,241.35	34	5148.062	369,373.48
7/8	3585.015	214,652.81	78	4339.515	285,865.59	76	5166.015	371,307.37
60	35co.coc	216,000 co	66	4356.000	287,496.00	72	5184 000	373,248,00
16	3615.015	217,352.81	1 / 8	4372.515	289,132.59	16	5202 015	375,195,37
14	3630.062	218,711.26	3 / 4	4389.062	290,775.39	16	5220 062	377,149,51
38	3645.140	220,075.35	3 / 8	4405.640	292,424.39	36	5238 140	379,110,42
1.6	3660.250	221,445.12	14	4422.250	294,079.62	1.2	5256.250	381,078.12
5.8	3675.390	222,820.55	56	4438.890	295,741.08	5.8	5274.390	383.052.61
3.4	3690.562	224,201.67	34	4455.562	297,408.79	3.4	5292.562	385,033.92
7.8	3705.765	225,588.43	76	4472.265	299,082.76	7.8	5310.765	387,022.04
61 16 14 36	3721.000 3736.265 3751.562 3766.890	226,9\$1.00 228,379.23 229,733.20 231,192.91	67 38 38	4489.000 4505.765 4522.562 4539.390	300,763.00 302,449.51 304,142.32 305,841.44	73 16 36 36	5329.000 5347.265 5365.562 5383.890	389,017.00 391,018.79 393,027.45 395.042.97
12	3782.250	232,608.37	15	4556.250	307,546.87	16	5402.250	397.065.37
56	3797.640	234,029.60	58	4573.140	309,258.63	58	5420.635	399.094.29
34	3813.062	235,456.60	34	4590.062	310,976.73	34	5439.062	401,130.85
36	3828.515	236,889.40	78	4607.015	312,701.18	78	5457.515	403,173.96
62	3844.000	238,328.00	68	4624.000	314,432.00	74	5476 000	405,204 00
16	3859.515	239,772.40	14	4641.015	316,169.18	16	5494.515	407,280.97
14	3875.062	241,222.64	14	4658.062	317,912.76	14	5513.062	409,344.89
36	3890.640	242,678.70	38	4675.140	319,662.74	38	5531.640	411,415.77
1/2	3906.250	244,140.62	1/2	4692.250	321,419.12	16	5550.250	413,493.62
5/8	3921.890	245,608.40	5/8	4709.390	323,181.93	56	5568.890	415,578.46
3/4	3937.562	247.082.04	3/4	4726.562	324,951.17	34	5587.562	417,670.29
7/8	3953.265	248,561.57	7/8	4743.765	326,726.85	78	5606.265	419,769.13
63	3969.000	250,047.00	69	4761.000	328,509.00	75	5625.000	421,875.00
34	3984.765	251,538.33	1/8	4778.265	330,297.61	14	5643.765	423,987.89
34	4000.562	253,035.57	1/4	4795.562	332,092.70	34	5662.562	426,107.82
35	4016.390	254,538.75	3/8	4812.890	333,894.28	38	5681.390	428,234.81
1/2	4032.250	255,047.87	14	4830.250	335,702.37	14	5700.250	430,368.87
3/6	4048.140	257,562.94	56	4847.640	337,516.97	58	5719.140	432,510.01
3/4	4064.062	259,083.98	34	4865.062	339,338.10	34	5738.062	434,658.23
3/6	4080.015	260,610.99	78	4882.515	341,165.77	78	5757.015	436,813.56

Squares and Cubes of Numbers from 1/32 to 100 (Continued)

		1			11011 732 10			
No.	Square	Cube	No.	Square	Cube	No.	Square	Cube
76	5776.000	438,976.∞	82	6724.000	551.368.00	88	7744.000	681,472.00
16	5795.015	441,145.56	14	6744.515	553.893.34	1/8	7766.015	684,380.12
14	5814.062	443,322.26	14	6765.002	556.426.39	1/4	7788.062	687,296.51
38	5833.140	445,506.11	38	6785.640	558,967.14	3/8	7810.140	690,221.17
3/4	5 ⁸ 52.250	447,697.12	1.6	6806.250	561,515.62	1/2	7832.250	693,154.12
5/8	5 ⁸ 71.390	449.895.30	5.6	6826.890	564,071.83	5/8	7854.390	696.095.36
3/4	5 ⁸ 90.5 ⁶ 2	452,100.67	3.4	6847.562	566,635.79	3/4	7876.562	699 044.92
7/8	5 ⁹ 99.7 ⁶ 5	454,313.23	7.6	6868.265	569,207.51	7/8	7898.765	702,002.79
77	5929.000	456.533.00	83	6889.000	571,787.00	89	7921.000	704.969.00
16	5948.265	458 759.98	14	6909.765	574,374.26	18	7943.265	707.943.54
14	5967.562	460,994.20	14	6930.562	576.969.32	14	7965.562	710.926.45
36	5986.890	463,235.66	36	6951.390	579,572.19	36	7987.890	713,917.72
1/2	6006.250	465.484.37	1/2	6972.250	582,182.87	14	8010.250	716,917.37
5/8	6025.640	467.740.35	5/8	6993.140	584,801.38	58	8032.640	719,925.41
3/4	6045.062	47c.303.60	3/4	7014.062	587.427.73	34	8055 062	722,941.85
7/8	6064.515	472,274.15	7/8	7035.015	590,061.93	78	8077.515	725,966.71
78	6084.000	474,552.00	84	7056.000	592 704.00	90	8100 000	729 000 00
16	6103.515	476,837.15	16	7077.015	595.353.93	16	8122.515	732 041.72
14	6123.062	479,129.64	14	7098.002	598.011.76	14	8145 062	735 091.89
36	6142.640	481,429.45	36	7119.140	600,677.49	36	8167.640	738,150.52
15	6162.250	483,736.62	1/2	7140.250	603,351.12	14	8190 250	741.217.62
56	6181.890	436,051.15	5/8	7161.390	606,032.68	56	8212 890	744.293.21
34	6201.562	488,373.04	3/4	7182.562	608,722.17	34	8235 562	747.377.29
78	6221.265	490,702.32	7/8	7203.765	611,419.60	76	8258 265	750,469.88
79 16 14 38	6241.000 6260.765 6280.562 6300.390	493,039.00 495,383.08 497.734.57 500,093.50	85 14 36	7225.000 7246.265 7267.562 7288.890	614,125.00 616,838.36 619,559.70 622,289.03	91 18 14 38	8281.000 8303.765 8326.562 8349.390	753.571.00 756,680.64 759 798.82 762,925.56
14	6320.250	502,459.87	15	7310.250	625,026.37	14	8372.250	766 060 .87
58	6340.140	504,833.69	56	7331.640	627,771.72	56	8395.140	769,204 .76
34	6360.062	507,214.98	34	7353.062	630,525.10	34	8418.062	772 .357 .23
78	6380.015	509,€03.74	76	7374.515	633,286.52	78	8441.015	775 .518 .31
80	6400.000	512,000.00	86	7396.000	636,056.00	92	8464.000	778,688.00
14	6420.015	514,403.75	16	7417.515	638,833.53	34	8487 015	781,866.31
14	6440.062	516,815.01	14	7439.062	641,619.14	34	8510 062	785,053.26
38	6460.140	519,233.80	36	7460.640	644,412.83	38	8533.140	788,248.86
1.6	6480.250	521,660.12	32	7482.250	647,214.62	36	8556.250	791.453.12
98	6500.390	524.093.99	56	7503.890	650,024.52	56	8579.390	794,666.05
34	6520.562	526,535.42	34	7525.562	652,842.54	34	8602.562	797,887.67
76	6540.765	528,984.42	78	7547.265	655,668.70	76	8625.765	801,117.98
81	6561.000	531,441.00	87	7569.000	658,503.00	93	8649.000	804,357 00
18	6581.265	533,905.17	36	7590.765	661,345.45	3/8	8672.265	807,604.73
14	6601.562	536,376.95	36	7612.562	664,196.07	3/4	8695.562	810,861.20
36	6621.890	538,856.35	36	7634.390	667,054.88	3/8	8718.890	814,126.41
12 55 34 76	6683 062	541.343.37 543,838.04 546,340.35 548,850.34	14 58 34 76	7678.140 7700 062	669,921.87 672,797.07 675.680.48 678,572.12	1/2 5/8 5/4 7/6	8789 062	817,400.37 820,683.10 823,974.61 827,274.90

Diam- eter	Circum- ference	Агеа	Diam- eter	Circum- ference	Агеа	Diam- eter	Circum- ference	Area
1/64	0.0491	0.0002	2	6.2832	3.1416	5	15.7080	19.635
1/82	0.0982	0.0008	1/16	6.4795	3.3410	1/16	15.9043	
1/16	0.1964	0.0031	1/8	6.6759	3.5466	1/8	16.1007	20.629
832	0. 2945	0.0069	8/16	6.8722	3.7583	346	16. 2970	21.135
1/8	0.3927	0.0123	1/4	7.0686	3.9761	1/4	16.4934	21.648
5/82	0.4909	0.0192	5/16	7.2649	4.2000	5/16	16.6897	22.166
946	0.5890	0.0276	8/8	7.4613	4.4301	8/8	16.886 r	22.691
7/82	0.6872	0.0376	7/18	7.6576	4.6664	7/18	17.0824	23.221
14	0.7854	0.0491	1/2	7.8540	4.9087	1/2	17.2788	
9/82	0.8836	0.0621	%16	8.0503	5.1572	%16	17.4751	24.301
546	0.9817	0.0767	5/8	8.2467	5.4119	5/8	17.6715	24.850
11/32	1.0799	0.0928	11/18	8.4430	5.6727	11/16	17.8678	25.406
3/8	1.1781	0.1105	3/4	8.6394	5.9396	8/4	18.06.12	25.967
13/82	1.2763	0.1296	13/18	8.8357	6.2126	13/16	18.2605	26.535
7/16	1.3745	0.1503	7/8	9.0321	6.4918	7/8	18.4569	27.109
15/82	1.4726	0.1726	15/16	9.2284	6.7771	15/16	18.6532	27.688
1/2	1.5708	0.1964	3	9.4248	7.0686	6	18.8496	28.274
17/32	1.6690	0.2217	1/16	9.6211	7.3662	1/8	19.2423	29.465
%16	1.7672	0.2485	16	9.8175	7.6699	1/4	19.6350	30.680
19/32	1.8653	0.2769	3/16	10.0138	7.9798	8/8	20.0277	31.919
5%	1.9635	0.3068	1/4	10.2102	8.2958	1/2	20.4204	33.183
21/32	2.0617	0.3382	546	10.4065	8.6179	5/8	20.8131	34.472
11/16	2.1598	0.3712	8/8	10.6029	8.9462	3/4	21.2058	35.785
23/32	2.2580	0.4057	7/10	10.7992	9.2806	7/9	21.5984	37.122
84	2.3562	0.4418	1/2	10.9956	9.6211	7	21.9911	38.485
25/82	2.4544	0.4794	%1e	11.1919	9.9678	1 1/8	22.3838	39.871
13/16	2.5525	0.5185	5/8	11.3883	10.321	1/4	22.7765	41.282
27/32	2.6507	0.5591	11/16	11.5846	10.680	8/8	23.1692	42.718
7/8	2.7489	0.6013	8/4	11.7810	11.045	1/2	23.5619	44.179
29/32	2.8471	0.6450	13/16	11.9773	11.416	5/8	23.9546	45.664
15/16	2.9452	0.6903	7/8	12.1737	11.793	8/4	24.3473	47.173
81/32	3.0434	0.7371	15/16	12.3700	12.177	78	24.7400	48.707
1 /32	3.1416	0.7854		12.5664	12.566	8	25.1327	50.265
346	3.3379	0.8866	4 1/16	12.7627	12.962	3/8	25.5254	51.849
1/8	3.5343	0.9940	1/8	12.9591	13.364	78 1/4	25.9181	53.456
346	3.7306	1.1075	8/16	13.1554	13.772	3/8	26.3108	55.088
1/4	3.9270	1.2272	1/4	13.3518	14.186	1/2	26.7035	56.745
5/16	4.1233	1.3530	516	13.5481	14.607	5/8	27.0962	58.426
3/8	4.3197	1.4849	8/8	13.7445	15.033	3/4	27.4889	60.132
7/16	4.5160	1.6230	7/16	13.9408	15.466	7/8	27.8816	61.862
1/2	4.7124	1.7671	1/2	14.1372	15.904	9 '8	28.2743	63.617
%16	4.9087	1.9175	946	14.3335	16.349	1/8	28.6670	65.397
5/8	5.1051	2.0739	5%	14.5299	16.800	1/4	29.0597	67.201
11/18	5.3014	2.2365	1145	14.7262	17.257	8/9	29.4524	69.029
84	5.4978	2.4053	84	14.9226	17.721	1/2	29.8451	70.882
1346	5.6941	2.5802	1846	15.1189	18.190	5%	30. 2378	72.760
7/8	5.8905	2.7612	7/8	15.3153	18.665	84	30.6305	74.662
15/16	6.0868	2.9483	1546	15.5116	19.147	7,6	31.0232	76.589
			/**	• •	1 "	/ "	3-	

Diam-	Circum-	Area	Diam-	Circum-	Area	Diam-	Circum-	Area
eter	ference		eter	ference		eter	ference	
10	31.4159	78.540	16	50.2655	201.06	22	69.1150	380.13
3/8	31.8086		1/8	50.6382	204.22	1/8	69.5077	384.46
1/4	32.2013		1/4	51.0509	207.39	34	69.9004	388.82
8%	32.5940	1	8/8	51.4436	210.60	5/8	70.2931	393.20
1/2	32.9867	86.590	1/2	51.8363	213.82	1/2	70.6858	397.61
5/8	33.3794	88.664	5/8	52.2290	217.08	5/8	71.0785	402.04
8/1	33.7721	90.763	3/4	52.6217	220.35	8/4	71.4712	406.49
7,9	34.1648	92.886	7,8	53.0144	223.65	7/8	71.8639	410.97
11	34.5575	95.033	17	53.4071	226.98	23	72.2566	415.48
1/8	34.9502	97.205	1/8	53.7998	230.33	3,6	72.6493	420.00
34	35.3429	99.402	34	54.1925	233.71	34	73.0420	424.56
8/8	35.7356	101.62	8/8	54.5852	237.10	3/8	73 - 4347	429.13
1/2	36.1283		1/2	54.9779	240.53	1/2	73.8274	433.74
5/8	36.5210	106.14	5/9	55.3706	243.98	5/8	74.2201	438.36
8,4	36.9137		84	55.7633	247 - 45	34	74.6128	443.01
7/8	37.3064		7,8	56.1560	250.95	3/8	75.∞55	447.69
12	37.6991		18	56.5487	254.47	24	75.3982	452.39
1/8	38.0918		1/8	56.9414	258.02	1/8	75.7909	457.11
3/4	38.4845		34	57.3341	261.59	34	76.1836	461.86
8/8	38.8772		8/3	57.7268	265.18	58	76.5763	466.64
1/2	39.2699		1/2	58.1195	268.80	1/2	76.9690	471.44
5/8	39.6626		5/8	58.5122	272.45	5/8	77.3617	476.26
8/4	40.0553		84	58.9049	276.12	8/1	77.7544	481.11
7,8	40.4480		7/8	59.2976	279.81	7/8	78.1471	485.98
13	40.8407		19	59.6903	283.53	25	78.5398	490.87
1/8	41.2334		1/8	60.0830	287.27	1/8	78.9325	495.79
34	41.6261		1/4	60.4757	291.04	74	79.3252	500.74
3/8	42.0188		8/8 1/2	60.8684	294.83 298.65	58 1/2	79.7179 80.1106	505.71 510.71
1/2	42.4115		5/2 5/8	61.6538	302.49	72 8/8	80.5033	515.72
5/8	42.8042 43.1969		34	62.0465	302.49	34	80.8960	520.77
84	43.1909		74	62.4392	310.24	78	81.2887	525.84
7/s	43.9823		20	62.8319	314.16	26	81.6814	530.93
14 1/9	44.3750		1/8	63.2246	318.10	1,6	82.0741	536.05
34	44.3730		1/4	63.6173	322.06	1/4	82.4668	541.19
8/8	45.1604		8/8	64.0100	326.05	8/8	82.8595	546.35
1/2	45.5531		1/2	64.4026	330.06	1/2	83.2522	551.55
5/8	45.9458		58	64.7953	334.10	5%	83.6449	556.76
8/4	46.3385		54	65.1880	338.16	8/4	84.0376	562.00
7.8	46.7312		7/8	65.5807	342.25	76	84.4303	567.27
15	47.1239		21	65.9734	346.36	27	84.8230	572.56
1/8	47.5166		1,6	66.3661	350.50	1,6	85.2157	577.87
1/4	47.9093		14	66.7588	354.66	1/4	85.6084	583.21
8%	48.3020		96	67.1515	358.84	5%	86.∞11	588.57
1/2	48.6947		1,6	67.5442	363. 05	1,6	86.3938	593.96
5/8	49.0874		5/8	67.9369	367.28	5/8	86.7865	599.37
8/4	49.4801		94	68.3296	371.54	8/4	87.1792	604.81
7/8	49.8728	197.93	7/8	68.7223	375.83	7/8	87.5719	610.27
		· ·		l		1		

Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Агеа	Diam- eter	Circum- ference	Area
28	87.9646	615.75	34	106.814	907.92	40	125.664	1256.6
1/8	88.3573	621.26	1/8	107.207	914.61	1/8	126.056	1264.5
3,4	88.7500	626.80	34	107.600	921.32	1/4	126.449	1272.4
8/8	89.1427	632.36	8/8	107.992	928.06	8/8	126.842	1280.3
1/2	89.5354	637.94	1/2	108.385	934.82	1/2	127.235	1288.2
5/8	89.9281	643.55	5/8	108.778	941.61	5/8	127.627	1296.2
3/4	90.3208	649.18	84	109.170	948.42	3/4	128.020	1304.2
7/8	90.7135	654.84	78	109.563	955.25	78	128.413	1312.2
29	91.1062	660.52	35	109.956	962.11	41	128.805	1320.3
1/8	91.4989	666.23	1/s	110.348	969.00	1/8	129.198	1328.3
1/4	91.8916	671.96	1,4	110.741	975.91	1/4	129.591	1336.4
%8	92.2843	677.71	3/8	111.134	982.84	3/8	129.983	1344.5
1/2	92.6770	683.49	1/2	111.527	989.80	1/2	130.376	1352.7
5/8	93. 0 697	689.3 0	5/8	111.919	996.78	5/8	130.769	1360.8
3/4	93.4624	695.13	8/4	112.312	1003.8	8/4	131.161	1369.0
7/8	93.8551	700.98	78	112.705	1010.8	7/8	131.554	1377.2
30	94.2478	706.86	36	113.097	1017.9	42	131.947	1385.4
1/8	94.6405	712.76	1/8	113.490	1025.0	1,6	132.340	1393.7
1/4	95.0332	718.69	1/4	113.883	1032.1	1/4	132.732	1402.0
8/8	95.4259	724.64	3/8	114.275	1039.2	8/8	133.125	1410.3
1/2	95.8186	730.62	1/2	114.668	1046.3	1/2	133.518	1418.6
5/8	96.2113	736.62	5/8	115.061	1053.5	5/8	133.910	1427.0
8/4	96.6040	742.64	84	115.454	1060.7	8/4	134.303	1435.4
7/8	96.9967	748.69	78	115.846	1068.0	7/8	134.696	1443.8
31	97.3894	754-77	37	116.239	1075.2	43	135.088	1452.2
1/8	97.7821	760.87	1/8	116.632	1082.5	1/8	135.481	
1/4	98.1748	766.99	1/4	117.024	1089.8	1/4	135.874	1469.1
%	98.5675	773.14	8/8	117.417	1097.1	3/8	136.267	1477.6
1/2	98.9602	779.31	1/2	117.810	1104.5	1/2	136.659	1486.2
5/8	99.3529	785.51	5/8	118.202	1111.8	5/8	137.052	1494.7
3/4	99.7456	791.73	8/4	118.596	1119.2	3/4	137.445	1503.3
78	100.138	797-98	78	118.988	1126.7	7/8	137.837	1511.9
32	100.531	804.25	38	119.381	1134.1	44	138.230	1520.5
3/8	100.924	810.54	1/8	119.773	1141.6	3/8	138.623	1529.2
1/4	101.316	816.86	14	120.166	1149.1	1/4	139.015	1537.9
8/8	101.709	823.21	8/8	120.559	1156.6	8/8	139.408	1546.6
1/2	102.102	829.58	3/2	120.951	1164.2	3/2	139.801	1555.3
5/8	102.494	835.97	5/8	121.344	1171.7	5/8	140.194	1564.0
3/4	102.887	842.39	8/4	121.737	1179.3	3/4	140.586	1572.8
3,6	103.280	848.83	7/8	122.129	1186.9	7/8	140.979	1581.6
33	103.673	855.30	39	122.522	1194.6	45	141.372	1590.4
1/8 1/	104.065	861.79	1/8	122.915	1202.3	1/8	141.764	1599.3
1/4	104.458	868.31 874.85	1/4	123.308	1	1/4	142.157	1608.2
3/8	104.051	881.41	3/8	123.700	1217.7	8/8	142.550	
1/2 5/	105.243	888.00	1/2	124.093	1225.4	1,6	142.942	1626.0
5% 84	105.030	894.62	5/8 8/	124.400	1233.2 1241.0	5/8 8/	143.335	1634.9
7,4	106.421	901.26	8/4 7/4	124.878	1241.6	8/4	143.728	1643.9 1652.9
79	1.00.421	901.20	7/s	123.2/1	1240.0	7/8	144.121	1032.9

Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area
46	144.513	1661.9	52	163.363	2123.7	58	182.212	2642.1
1/8	144.906	1670.9	1/8	163.756	2133.9	1/8	182.605	2653.5
1/4	145.299	1680.0	1/4	164.148	2144.2	1/4	182.998	2664.9
8/8	145.601	1689.1	8/8	164.541	2154.5	8/8	183.390	2676.4
1,5	146.084	1698.2	1/2	164.934	2164.8	1/2	183.783	2687.8
56	146.477	1707.4	5/8	165.326	2175.1	5/8	184.176	2699.3
84	146.869	1716.5	8/4	165.719	2185.4	8/4	184.569	2710.9
76	147.262	1725.7	7/8	166.112	2195.8	78	184.961	2722.4
47	147.655	1734.9	53	166.504	2206.2	59	185.354	2734.0
⅓8	148.048	1744.2	1/8	166.897	2216.6	1/8	185.747	2745.6
1/4	148.440	1753.5	1/4	167.290	2227.0	1/4	186.139	2757.2
88	148.833	1762.7	8/8	167.683	2237.5	8/9	186.532	2768.8
1/2	149.226	1772.1	1/2	168.075	2248.0	1/2	186.925	2780.5
5/8	149.618	1781.4	5/8	168.468	2258.5	5/8	187.317	2792.2
8/4	150.011	1790.8	8/4	168.861	2269.1	3/4	187.710	2803.9
7/8	150.404	1800.1	7/8	169.253	2279.6	7/8	188.103	2815.7
48	150.796	1809.6	54	169.646	2290.2	60	188.496	2827.4
1/8	151.189	1819.0	1/8	170.039	2300.8	1/8	188.888	2839.2
1/4	151.582	1828.5	3/4	170.431	2311.5	3/4	189.281	2851.0
88	151.975	1837.9	8/8	170.824	2322.1	3/8	189.674	2862.9
1/2	152.367	1847.5	1/2	171.217	2332.8	1/2	190.066	2874.8
5/8	152.760	1857.0	5/8	171.609	2343-5	5/8	190.459	2886.6
8/4	153.153	1866.5	3/4	172.002	2354.3	84	190.852	2898.6
7/8	153.545	1876.1	7/8	172.395	2365.0	7/8	191.244	2910.5
49	153.938	1885.7	55	172.788	2375.8	61	191.637	2922.5
1,8	154.331	1895.4	1/8	173.180	2386.6	3/8	192.030	2934-5
34	154.723	1905.0	3/4	173.573	2397.5	3/4	192.423	2946.5
88	155.116	1914.7	8/8	173.966	2408.3	8/8	192.815	2958.5
1/2	155.509	1924.4	1/2	174.358	2419.2	1/2	193.208	2970.6
5/8	155.902	1934.2	5/8	174.751	2430. I	5/8	193.601	2982.7
3/4	156.294	1943.9	8/4	175.144	2441.1	8/4	193.993	2994.8
7,8	156.687	1953.7	7,6	175.536	2452.0	7/8	194.386	3006.9
50	157.080	1963.5	56	175.929	2463.0	62	194.779	3019.1
1/8	157.472	1973.3	1/8	176.322	2474.0	1/8	195.171	3031.3
1/4	157.865	1983.2	34	176.715	2485.0	1/4	195.564	3043.5
8/8	158.258	1993.1	8/8	177.107	2496.1	3/9	195.957	3055.7
36	158.650	2003.0	1/2	177.500	2507.2	1/2	196.350	3068. 0
5/8	159.043	2012.9	5/8	177.893	2518.3	5/8	196.742	3080.3
8/4	159.436	2022.8	8/4	178.285	2529.4	3/4	197.135	3092.6
7∕8	159.829	2032.8	7/8	178.678	2540.6	7/8	197.528	3104.9
51	160,221	2042.8	57	179.071	2551.8	63	197.920	3117.2
1/8	160.614	2052.8	1/s	179.463	2563.0	3/8	198.313	3129.6
34	161.007	2062.9	3/4	179.856	2574.2	3/4	198.706	3142.0
86	161.399	2073.0	5/8	180.249	2585.4	8%	199.098	3154.5
1/2	161.792	2083.1	1/2	180.642	2596.7	1,6	199.491	3166.9
58	162.185	2093.2	5/8	181.034	2608.0	55	199.884	3179.4
8/4	162.577	2103.3	8/4	181.427	2619.4	8/4	200.277	3191.9
7/8	162.970	2113.5	7,6	181.820	2630.7	76	200.669	3204.4

Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area
64	201.062	3217.0	70	219.911	3848.5	76	238.761	4536.5
1/8	201.455	3229.6	1/8	220.304	3862.2	1/8	239.154	4551.4
1/4	201.847	3242.2	1/4	220.697	3876.0	1/4	239.546	4566.4
8/8	202.240	3254.8	8/8	221.090	3889.8	8/8	239.939	4581.3
1/2	202.633	3267.5	1/2	221.482	3903.6	1/2	240.332	4596.3
5/8	203.025	3280.I	56	221.875	3917.5	5/8	240.725	4611.4
8/4	203.418	3292.8	8/4	222.268	3931.4	3/4	241.117	4626.4
7/8	203.811	3305.6	7/8	222.660	3945.3	7/3	241.510	4641.5
65	204.204	3318.3	71	223.053	3959.2	77	241.903	4656.6
1/8	204.596	3331.1	1/8	223.446	3973.1	1/8	242.295	4671.8
1/4	204.989	3343.9	34	223.838	3987.1	1/4	242.688	4686.9
3/8	205.382	3356.7	8/8	224.231	4001.1	8/8	243.081	4702.I
1/2	205.774	3369.6	1/2	224.624	4015.2	1/2	243.473	4717.3
5/8	206.167	3382.4	5/8	225.017	4029.2	5/8	243.866	4732.5
8/4	206.560	3395-3	8/4	225.409	4043.3	8/4	244.259	4747.8
7/8	206.952	3408.2	7/8	225.802	4057.4	7/8	244.652	4763.I
66	207.345	3421.2	72	226.195	4071.5	78	245.044	4778.4
1/8	207.738	3434.2	1/8	226.587	4085.7	1/8	245.437	4793.7
34	208.131	3447.2	34	226.980	4099.8	34	245.830	4809.0
8/8	208.523	3460.2	8/8	227.373	4114.0	8/8	246.222	4824.4
1/2	208.916	3473.2	1/2	227.765	4128.2	1/2	246.615	4839.8
5/8	209.309	3486.3	5/8	228.158	4142.5	5/8	247.008	4855.2
34	209.701	3499.4	8/4	228.551	4156.8	8/4	247.400	4870.7
7/8	210.094	3512.5	7/8	228.944	4171.1	7/8	247.793	4886.2
67	210.487	3525.7	73	229.336	4185.4	79	248.186	4901.7
1/8	210.879	3538.8	1/3	229.729	4199.7	1/8	248.579	4917.2
1/4	211.272	3552.0	1/4	230.122	4214.1	1/4	248.971	4932.7
8/8	211.665	3565.2	3/8	230.514	4228.5	8/3	249.364	4948.3
1/2	212.058	3578.5	1/2	230.907	4242.9		249.757	4963.9
5/8	212.450	3591.7	5/8	231.300	4242.9	1/2	250.149	4979.5
8/4	212.843	3605.0	8/4	231.692	4271.8	5/8	250.542	4979.3
7/8	213.236	3618.3	7/8	232.085	42/1.0	84	250.935	5010.9
68	213.628	3631.7	74	232.478	4300.8	80 7/8	251.327	5026.5
1/8	214.021	3645.0	14	232.871	4315.4	1/8	251.720	5042.3
1/4	214.414	3658.4	1/4	233.263	4329.9	1/4	252.113	5058.0
3/8	214.806	3671.8	8/8	233.656	4344.5	3/8	252.506	5073.8
1/2	215.199	3685.3	1/2	234.049	4359.2	1/2	252.898	5089.6
5/8	215.592	3698.7	5/8	234.441	4339.2	58	253.291	5105.4
8/4	215.984	3712.2	34	234.834	4373.8	8/4	253.684	5121.2
7/8	216.377		7.6	235.227		7,8	254.076	5137.1
69 '8	216.770	3725.7 3739.3		235.227	4403. I	81	254.469	5153.0
1/8	217.163	3752.8	75 ½	235.019	4417.9	1/8	254.409	5168.9
78 1/4	217.103	3766.4	78 1/4	236.405		1/4	255.254	5184.9
8/8	217.555	3780.0	1 1		4447.4	36	255.254	5104.9
	218.341		8/8	236.798	4462.2		256.047	5216.8
1/2 5/2	218.733	3793·7 3807.3	1/2	237.190	4477.0	1,2	256.433	5232.8
8/4	219.126	3821.0	5/8	237.583	4491.8	5/8	250.433	5232.8
% 7/8	- 1	-	8/1	237.976	4506.7	3/1	250.825	5264.9
/8	219.519	3834.7	7/8	238.368	4521.5	7/8	237.210	3204.9

	ference	Area	Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area
82	257.611	5281.0	88	276.460	6082.1	94	295.310	6939.8
3/8	258.003	5297.1	1 ∕8	276.853	6099.4	1,8	295.702	6958.2
34	258.396	5313.3	1/4	277.246	6116.7	1/4	296.095	6976.7
3/8	258.789	5329.4	8/9	277.638	6134.1	8/8	296.488	6995.3
1/2	259.181	5345.6	3/2	278.031	6151.4	1/2	296.881	7013.8
5/8	259.574	5361.8	5/8	278.424	6168.8	5/8	297.273	7032.4
8/4	259.967	5378.1	8/4	278.816	6186.2	3,4	297.666	7051.0
78	260.359	5394.3	3/8	279.209	6203.7	78	298.059	7069.6
83	260.752	5410.6	89	279.602	6221.1	95	298.451	7088.2
18	261.145	5426.9	38	279.994	6238.6	1/8	298.844	7106.9
14	261.538	5443.3	1/4	280.387	6256.1	1,4	299.237	7125.6
8/8	261.930	5459.6	8/8	280.780	6273.7	88	299.629	7144.3
1/2	262.323	5476.0	1/2	281.173	6291.2	1/2	300.022	7163.0
5/8	262.716	5492.4	5/8	281.565	6308.8	5%	300.415	7181.8
84	263.108	5508.8	8/4	281.958	6326.4	84	300.807	7200.6
7/8	263.501	5525.3	7,8	282.351	6344.1	7.8	301.200	7219.4
84	263.894	5541.8	90	282.743	6361.7	96	301.593	7238.2
1/8	264.286	5558.3	1/8	283.136	6379.4	1/8	301.986	7257.1
1/4	264.679	5574.8	34	283.529	6397.1	1/4	302.378	7276.0
3/8	265.072	5591.4	8/8	283.921	6414.9	8/8	302.771	7294.9
1,5	265.465	5607.9	3/2	284.314		1/2	303.164	7313.8
5/8	265.857	5624.5	5/8	284.707	6450.4	58	303.556	7332.8
84	266.250	5641.2	8/4	285.1∞	6468.2	8/4	303.949	7351.8
78	266.643		7/8	285.492	6486.0	7,6	304.342	7370.8
85	267.035	5674.5	91	285.885	6503.9	97	304.734	7389.8
16	267.428		1,8	286.278	6521.8	1/8	305.127	7408.9
3/4	267.821	5707.9	14	286.670	6539.7	1,4	305.520	7428.0
8/8	268.213	5724.7	8/8	287.063	6557.6	3,8	305.913	7447.1
1/2	268.606	5741.5	1,2	287.456	6575.5	1,2	306.305	7466.2
5/8	268.999	5758.3	55	287.848	6593.5	5/8	306.698	7485.3
8/4	269.392	5775.1	8/4	288.241	6611.5	34	307.091	7504.5
7/8	269.784	5791.9	78	288.634	6629.6	7.6	307.483	7523.7
86	270.177	5808.8	92	289.027	6647.6	98	307.876	7543.0
1/8	270.570	5825.7	3/8	289.419	6665.7	1,8	308.269	7562.2
14	270.962	5842.6	34	289.812	6683.8	34	308.661	7581.5
8%	271.355	5859.6	2,8	290.205	6701.9	88	309.054	7600.8
1/2	271.748	5876.5	3/2	290.597	6720.1	1,2	309.447	7620.1
5/8	272.140	5893.5	58	290.990	6738.2	5,4	309.840	7639.5
84	272.533	5910.6	8/4	291.383	6756.4	34	310.232	7658.9
7,8	272.926	5927.6	7/8	291.775	6774.7	76	310.625	7678.3
87	273.319	5944.7	93	292.168	6792.9	99	311.018	7697.7
3,6	273.711	5961.8	1/8	292.561	6811.2	1/8	311.410	7717.1
3/4	274.104	5978.9	1/4	292.954	6829.5	34	311.803	7736.6
8/8	274.497	5996.0	8/8	293.346		8/8	312.196	7756.1
1/2	274.889	6013.2	3/2	293.739	6866.1	1,6	312.588	7775.6
98	275.282	6030.4	5/8	294.132	6884.5	5%	312.981	7795.2
84	275.675	6047.6	84	294.524	6902.9	84	313.374	7814.8
7,6	276.067	6064.9	7,6	294.917	6921.3	7/8	313.767	7834.4

Diam-	Circum-		Diam-	Circum-		Diam-	Circum-	
eter	ference	Area	eter	ference	Area	eter	ference	Area
100	314.16	7,834.0	150	471.24	17,671.5	200	628.32	31,415.9
101	317.30	8,011.8	151	474.38	17,907.9	201	631.46	31,730.9
102	320.44	8,171.3	152	477.52	18,145.8	202	634.60	32,047.4
103	323.58	8,332.3	153	480.66	18,385.4	203	637.74	32,365.5
104	326.73	8,494.9	154	483.81	18,626.5	204	640.88	32,685.1
105	329.87	8,659.0	155	486.95	18,869.2	205	644.03	33,006.4
106	333.01	8,824.7	156	490.09	19,113.4	206	647.17	33,329.2
107	336.15	8,992.0	157	493.23	19,359.3	207	650.31	33,653.5
108	339.29	9,160.9	158	496.37	19,606.7	208	653.45	33,979.5
109	342.43	9,331.3	159	499.51	19,855.7	209	656.59	34,307.0
110	345.58	9,503.3	160	502.65	20,106.2	210	659.73	34,636.1
III	348.72	9,676.9	161	505.80	20,358.3	211	652.88	34,966.7
112	351.86	9,852.0	162	508.94	20,612.0	212	660.02	35,298.9
113	355.00	10,028.7	163	512.08	20,867.2	213	669.16	35,632.7
114	358.14	10,207.0	164	515.22	21.124.1	214	672.30	35,968.1
115	361.28	10,386.9	165	518.36	21,382.5	215	675.44	36,305.0
116	364.42	10,568.3	166	521.50	21,642.4	216	678.58	36,643.5
117	367.57	10,751.3	167	524.65	21,904.0	217	681.73	36,983.6
118	370.71	10,935.9	168	527.79	22,167.1	218	684.87	37,325.3
119	373.85	11,122.0	169	530.93	22,431.8	219	688.01	37,668.5
120	376.99	11,309.7	170	534.07	22,698.0	220	691.15	38,013.3
121	380.13	11,499.0	171	537.21	22,965.8	221	694.29	38,359.6
122	383.27	11,689.9	172	540.35	23,235.2	222	697.43	38,707.6
123	386.42	11,882.3	173	543.50	23,506.2	223	700.58	39,057.1
124	389.56	12,076.3	174	546.64	23,778.7	224	703.72	39,408. I
125	392.70	12,271.8	175	549.78	24,052.8	225	706.86	39,760.8
126	395.84	12,469.0	176	552.92	24,328.5	226	710.00	40,115.0
127	398.98	12,667.7	177	556.06	24,605.7	227	713.14	40,470.8
128	402.12	12,868.0	178	559.20	24,884.6	228	716.28	40,828.1
129	405.27	13,069.8	179	562.35	25,164.9	229	719.42	41,187.1
130	408.41	13,273.2	180	565.49	25,446.9	230	722.57	41,547.6
131	411.55	13,478.2	181	568.63	25,730.4	231	725.71	41,909.6
132	414.69	13,684.8	182	571.77	26,015.5	232	728.85	42,273.3
133	417.83	13,892.9		574.91	26,302.2	233	731.99	42,638.5
134	420.97	14,102.6	184	578.05	26,590.4	234	735.13	43,005.3
135	424.12	14,313.9		581.19	26,880.3	235	738.27	43,373.6
136	427.26	14,526.7	186	584.34	27,171.6	236	741.42	43,743.5
137	430.40	14,741.1	187	587.48	27,464.6	237	744.56	44,115.0
138	433.54	14,957.1	188	590.62	27,759.1	238	747.70	44,488.1
139	436.68	15,174.7	189	593.76	28,055.2	239	750.84	44,862.7
140	439.82	15,393.8	190	596.90	28,352.9	240	753.98	45,238.9
141	442.96	15,614.5	191	600.04	28,652.1	241	757.12	45,616.7
142	446.11	15,836.8		603.19	28,952.9	242	760.27	45,996.1
143	449.25	16,060.6	193	606.33	29,255.3	243	763.41	46,377.0
144	452.39	16,286.0		609.47	29,559.2	244	766.55	46,759.5
145	455.53	16,513 ^	195	612.61	29,864.8	245	769.69	47,143.5
146	458.67	16,741.5		615.75	30,171.9	246	772.83	47,529.2
147	461.81	16,971.7		618.89	30,480.5	247	775.97	47,916.4
148		17,203.4		622.04	30,790.7	248	779.11	48,305.1
149	468.10							48,695.5
149	468.10	17,436.6	199	625.18	31,102.6	249	782.26	48,695.

Diam-	Circum-	1	Diam-	Circum-		Diam-	Circum-	
eter	ference	Агеа	eter	ference	Area	eter	ference	Area
250	785.40	49,087.4	300	942.48	70,685.8	350	1099.56	96,211.3
251	788.54	49,480.9	301	945.62		351	1102.70	96,761.8
252	791.68	49,875.9	302	948.76		352	1105.84	
253	794.82	50,272.6	303	951.90		353	1108.98	97,867.7
254	797.96	50,670.7	304	955.04	72,583.4	354	1112.12	98,423.0
255	801.11	51,070.5	305	958.19	73,061.7	355	1115.27	98,979.8
256	804.25	51,471.9	306	961.33	73,541.5	356	1118.41	99,538.2
257	807.39	51,874.8	307	964.47	74,023.0	357	1121.55	100,098
258	810.53	52,279.2	308	967.61	74,506.0	358	1124.69	100,660
259	813.67	52,685.3	309	970.75	74,990.6	359	1127.83	101,223
260	816.81	53,092.9	310	973.89	75,476.8	360	1130.97	101,788
261	819.96	53,502.1	311	977.04	75,964.5	361	1134.11	102,354
262	823.10	53,912.9	312	980.18	76,453.8	362	1137.26	102,922
263	826.24	54,325.2	313	983.32	76,944.7	36 3	1140.40	103,491
264	829.38	54,739.1	314	986.46	77,437.1	364	1143.54	104,062
265	832.52	55,154.6	315	989.60	77,931.1	365	1146.68	104,635
266	835.66	55,571.6	316	992.74	78,426.7	366	1149.82	105,209
267	838.81	55,990.2	317	995.88	78,923.9	367	1152.96	105,784
268	841.95	56,410.4	318	999.03	79,422.6	368	1156.11	106,362
269	845.09	56,832.2	319	1002.17	79,922.9	369	1159.25	106,941
270	848.23	57,255.5	320	1005.31	80,424.8	370	1162.39	
271	851.37	57,680.4	321	1008.45	80,928.2	371	1165.53	108,103
272	854.51	58,106.9	322	1011.59	81,433.2	372	1168.67	108,687
273	857.65	58,534.9	323	1014.73	81,939.8	373	1171.81	109,272
274	860.80	58,964.6	324	1017.88	82,448.0	374	1174.96	109,858
275	863.94	59,395.7	325	1021.02	82,957.7	375	1178.10	110,447
276	867. 0 8	59,828.5	326	1024.16	83,469.0	376	1181.24	111,036
277	870.22	60,262.8	327	1027.30	83,981.8	377	1184.38	111,628
278	873.36	60,698.7	328	1030.44		378	1187.52	112,221
279	876.50	61,136.2	329	1033.58		379	1190.66	112,815
280	879.65	61,575.2	330	1036.73	85,529.9	380	1193.81	113,411
281	882.79	62,015.8	331	1039.87	86,049.0	381	1196.95	114,009
282	885.93	62,458.0	332	1043.01	86,569.7	382	1200.09	114,608
283	889.07	62,901.8	333	1046.15		383	1203.23	115,209
284	892.21	63,347.1	334	1049.29	87,615.9	384	1206.37	115,812
285	895.35	63,794.0	335	1052.43	88,141.3	385	1209.51	116,416
286	898.50	64,242.4	336	1055.58	88,668.3	386	1212.65	117,021
287	901.64	64,692.5	337	1058.72	89,196.9	387	1215.80	117,628
288	904.78	65,144.1	338		89,727.0	388	1218.94	118,237
289	907.92	65,597.2	339	1065.∞	90,258.7	389	1222.08	118,847
290	911.06	66,052.0	340	1068.14	90,792.0	390	1225.22	119,459
291	914.20	66,508.3	341	1071.28	91,326.9	391	1228.36	120,072
292	917.35	66,966.2	342	1074.42	91,863.3	392	1231.50	120,687
293	920.49	67,425.6	343	1077.57	92 401.3	393	1234.65	121.301
294	923.63	67,886.7	344	1080.71	92,940.9	394	1237.79	121,922
295	926.77	68,349.3	345	1083.85	93,482.0	395	1240.93	122,542
296	929.91	68,813.4	346	1086.99	94,024.7	396	1244.07	123,163
297	933.05	69,279.2	347	1090.13	94,569.0	397	1247.21	123,786
298	936.19	69,746.5	348	1093.27	95,114.9	398	1250.35	124,410
299	939-34	70,215.4	349	1096.42	95,662.3	399	1253.50	125,036

			I D:	C*		T		
Diam-	Circum- ference	Area	Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area
400	1255.64	125,664	450	1413.72	159,043	500	1570.80	196,350
401	1259.78	126,293	451	1416.80		501	1573.94	
402	1262.92		452	1420.00		502	1577.0S	
403	1200.00		453	1423.14		503	1580.22	198,713
404	1269.20		454	1426.28		504	1583.36	
405	1272.35		455	1429.42		505	1586.50	
400	1275.49		456	1432.57		506		201,090
407	1278.63		457	1435.71		507	1592.79	
408	1281.77	130,741	458	1438.85		508	1595.93	
409	1284.91	131,382	459	1441.99		509	1599.07	203,482
410	1283.05		460	1445.13		510	1602.21	204,282
411	1291.19		461	1448.27	166,914	511	1605.35	205,084
412	1294.34	133,317	462	1451.42	157,639	512	1608.50	205,887
413	1297.48	133,965	463	1454.56	168,365	513	1611.64	206,692
414	1300.62		464	1457.70		514	1514.78	207,499
415	1303.76	135,265	405	1400.84	169,823	515	1617.92	208,307
410	1306.90		400	1463.98		516	1621.06	209.117
417	1310.04	136,572	467	1467.12	171,287	517	1624.20	209,928
418	1313.19	137,228	463	1470.27	172,021	518	1627.35	210,741
419	1316.33	137,885	469	1473.41	172,757	519	1630.49	211,556
420	1319.47	138,544	470	1476.55	173,494	520	1633.63	212,372
421	1322.61	139,205	471	1479.69	174,234	521	1636.77	213,189
422	1325.75	139,867	472	1482.83		522	1639.91	214.008
423	1328.89	140,531	473	1485.97	175,716	523	1643.05	214,829
424	1332.04	141,196	474	1489.11	176,460	524	1646.20	215,631
425	1335.18	141,863	475	1492.26	177,205	525	1649.34	216,475
426	1338.32	142,531	476	1495.40	177,952	526	1652.48	217.301
427	1341.45	143,201	477	1493.54	178,701	527	1655.62	218,128
428	1344.60	143,872	478	1501.68		528	1658.76	218,956
429	1347.74		479	1504.82	180,203	529	1661.90	219,787
430	1350.88		480	1507.96		530	1665.04	220,618
431	1354.03		481	1511.11		531	1668.19	221,452
432	1357.17		482	1514.25		532	1671.33	222,287
433	1350.31		483	1517.39		533	1674.47	223,123
434	1363.45		484	1520.53		534	1677.61	223,961
435	1366.59		485	1523.67	184,745	535	1680.75	224,801
436	1369.73		486	1525.81		530	1683.89	225,642
437	1372.88		487	1529.96		537	1687.04	226,484
438	1370.02		483	1533.10		538	1690.18	227,329
439	1379.16		489	1536.24		539	1693.32	228,175
440		152,053	490	1539.38		540	1696.46	229,022
441	1385.44		491	1542.52	189.345	541	1699.60	229,871
442	1388.58	153,439	492	1545.60		542	1702.74	230,722
443	1391.73	154,134	493	1548.81		543	1705.88	231,574
444	1394.87	154,830	494	1551.95		544	1709.03	232,425
445	1398.01		495	1555.09		545	1712.17	233,283
446	1401.15		496	1553.23		545	1715.31	234,140
447	1404.29		497	1501.37		547	1718.45	234,998
448	1407.43		498	1564.51		548		235,858
449	1410.58	155,337	499	1567.65	-95,505	549	1724.73	230,720

Diam-	Circum-		Diam-	Circum-		Diam-	Circum-	
eter	ference	Area	eter	ference	Area	eter	ference	Area
550	1727.88	237,583	600	1884.96	282,743	650	2042.04	331,831
551	1731.02	238,448	601	1888.10	283,687	651	2015.18	
552	1734.16	239,314	602	1891.24	284,631	652	2048.32	333,876
553	1737.30		603	1894.38	285,578	653	2051.46	
554	1740.44		604	1897.52	286,526	654	2054.60	
555	1743.58		605	1900.66	287,475	655	2057.74	
556	1746.73		606	1903.81	288,426	656	2060.88	
557	1749.87		607	1906.95	289,379	657	2064.03	
558	1753.01		608	1910.09	290,333	658	2067.17	340,049
559	1756.15	245,422	609	1913.23	291,289	659	2070.31	
560	1759.29		610	1916.37	292,247	660	2073.45	342,119
561	1762.43		611	1919.51	293,206	66 r	2076.59	
562	1765.58		612	1922.65	294,166	662	2079.73	344,196
563	1768.72		613	1925.80	295,128	663	2082.88	
564	1771.86		614	1928.94	296,092	664	2086.02	346,279
565	1775.00		615	1932.08	297,057	665	2089.16	347,323
566	1778.14		616	1935.22	298,024	666	2092.30	348,368
567	1781.28		617	1938.36	298,992	667	2095.44	349,415
568	1784.42		618	1930.30	299,962	668	2098.58	
569	1787.57	254,281	619	1944.65	300,934	669	2101.73	351,514
570	1790.71		620	1947.79	301,907	670	2104.87	352,565
571	1793.85		621	1950.93	302,882	671	2108.01	353,618
572	1796.99		622	1954.07	303,858	672	2111.15	354,673
573	1800.13		623	1957.21	304,836	673	2114.29	355,730
574	1803.27		624	1957.21	305,815	674	2117.43	356,788
575	1806.42		625	1963.50	305,796	675	2120.58	357,847
576	1800.42		626	1966.64	307,779	676	2123.72	358,908
577	1812.70	, ,,,	627	1969.78	308,763	677	2126.86	359,971
578	1815.84		628	1972.92	309,748	678	2130.00	361,035
579	1818.98		629	1976.06	310,736	679	2133.14	362,101
580	1822.12		630	1979.20	311,725	680	2136.28	363,168
581	1825.27	265,120	631	1979.20	312,715	681	2139.42	364,237
582	1828.41		632	1985.49	313,707	682	2139.42	365,308
583	1831.55		633	1988.63	314,700	683	2142.37	366,380
584	1834.69		634	1988.03	315,696	684	2148.85	367,453
585	1837.83		635	1991.77	316,692	685	2151.99	368,528
586	1840.97	269,703	636	1993.91	317,690	686	2151.99	369,605
587	1844.11		637	2001.19	317,090	687	2158.27	370,684
588	1847.26	270,624	638		319,692	688	2161.42	
589	1850.40		639	2004.34		689	2164.56	372,845
1				2007.48	320,695	690	2167.70	373,928
590	1853.54		640	2010.62	321,699	69 r	2170.84	375,013
591	1856.68		641	2013.76	322,705	692	2173.98	375,013
592	1859.82		642	2016.90	323,713	-		370,009
593	1866.11	276,184	643	2020.04	324,722	693	2177.12	377,107
594	1		644	2023.19	325,733	694	2183.41	
595	1869.25		645	2026.33	326,745	695		379,367
596	1872.39		646	2029.47	327,759	696	2186.55	380,459
597	1875.53		647	2032.61	328,775	697	2189.69	381,554 382,649
598	1878.67		648	2035.75	329,792	698	2192.83	
599	1881.81	201,002	649	2038.89	330,810	699	2195.97	303,740

Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area	Diam- eter	Circum- ference	Area
700	2199.11	384,845	l	2356.19	441,786	800	2513.27	502,655
701	2202.26	385,945	750 751	2359.34	442,965	801	2516.42	503,912
702	2205.40	387,047		2362.48	444,146	802	2519.56	505,171
	2208.54	388,151	752	2365.62	444,140	803	2519.30	506,432
703	2211.68	389,256	753	2368.76	1	803	2525.84	507,694
704	2211.03	390,363	754	2300.70	446,511	805	2528.98	
706	2217.96	391,471	755 756	2375.04	447,097	800	2532.12	510,223
707	2221.11	392,580		2378.19	450,072	807	2535.27	
708	2224.25	393,692	757 758	2381.33	450,072	So8	2538.41	512,758
709	2227.39	394,805	759	2384.47	452,453	809	2541.55	
710	2230.53	395,919	760	2387.61	452,453	810	2544.69	515,300
711	2233.67	397,035	761	2390.75	454,841	811	2547.83	
712	2236.81	398,153	762	2393.89	456,037	812	2550.97	517,848
713	2239.96	399,272	763	2393.09		813	2554.11	
714	2243.10	400,393	764	2400.18		814	2557.26	
715	2246.24	401,515	765	2403.32	459,635	815	2560.40	521,681
716	2240.24	402,639	766	2405.32	460,837	816	2563.54	522,962
717	2252.52	403,765	767	2400.40		817	2566.68	524,245
718	2252.52	404,892	768	2412.74	463,247	818	2569.82	525,529
719	2258.81	406,020	769	2415.88	464,454	819	2572.96	526,814
720	2261.95	407,150	770	2419.03	465,663	820	2576.11	528,102
721	2265.09	408,282	771	2419.03	466.873	821	2579.25	529,391
1 1	2268.23	409,416		2422.17	468,085	822	25/9.25	529,391
722	- 1		772			823		
723	2271.37	410,550	773 774	2428.45 2431.59	469,298 470,513	824	2585.53 2588.67	531,973 533,267
725	2277.65	412,825	775	2431.39	470,313	825	2591.81	534,562
726	2280.80	413,965	776	2434.73	471,730	826	2591.01	535,858
727	2283.94	415,106	777	2441.02	474,168	827	2598.10	537,157
728	2287.08	416,248	778	2444.16	475,389	828	2601.24	538,456
729	2290.22	417,393	779	2447.30	476,612	829	2604.38	539,758
730	2293.36	418,539	780	2450.44	477,836	830	2607.52	541,061
731	2296.50	419,686	781	2453.58	477,030	831	2610.66	542,365
732	2299.65	420,835	782	2456.73	480,290	832	2613.81	543,671
733	2302.79	421,986	783	2459.87	481,519	833	2616.95	544,979
734	2305.93	423,138	784	2463.01	482,750	834	2620.09	546,288
735	2309.07	424,292	785	2466.15	483,982	835	2623.23	547,599
736	2312.21	425,447	786	2469.29	485,216	836	2626.37	548,912
737	2315.35	426,604	787	2472.43	486,451	837	2629.51	550,226
738	2318.50	427,762	788	2475.58	487,688	838	2632.65	551,541
739	2321.64	428,922	789	2478.72	488,927	839	2635.80	552,858
740	2324.78	430,084	790	2481.86	490,167	840	2638.94	554,177
741	2327.92	431,247	791	2485.00	491,409	841	2642.08	555,497
742	2331.06	432,412	792	2488.14	492,652	842	2645.22	556,819
743	2334.20	433,578	793	2491.28	493,897	843	2648.36	558,142
744	2337.34	434,746	794	2494.42	495,143	844	2651.50	559,467
745	2340.49	435,916	795	2497.57	496,391	845	2654.65	560,794
746	2343.63	437,087	796	2500.71	497,641	846	2657.79	562,122
747	2346.77	438,259	797	2503.85	498,892	847	2660.93	563,452
748	2349.91	439,433	798	2506.99	500,145	848	2664.07	564,783
749			799	2510.13	501,399	849	2667.21	566,116

Diam-	Circum-	Area	Diam-	Circum-	Area	Diam-	Circum-	Area
eter	ference		eter	ference		eter	ference	
850	2670.35	567,450	900	2827.43	636,173	950	2984.51	708,822
851	2673.50	568,786	901	2830.58	637,587	951	2987.65	710,315
852	2676.64	570,124	902	2833.72	639,∞3	952	2990.80	711,809
853	2679.78	571,463	903	2836.86	640,421	953	2993.94	713,306
854	2682.92	572,803	904	2840.00	641,840	954	2997.08	714,803
855	2686.06	574,146	905	2843.14	643,261	955	3000.22	716,303
856	2689.20		906	2846.28		956	3003.36	717,804
857	2692.34		907	2849.42	646,107	957	3006.50	
858	2695.49		908	2852.57	647,533	958	3009.65	720,810
859	2698.63		909	2855.71	648,960	959	3012.79	722,316
860	2701.77	580,880	910	2858.85	650,388	960	3015.93	723,823
861	2704.91		911	2861.99	651,818	961	3019.07	725,332
862	2708.05		912	2865.13	653,250	962	3022.21	726,842
863	2711.19		913	2868.27	654,684	963	3025.35	728,354
864	2714.34	586,297	914	2871.42	656,118	964	3028.50	729,867
865	2717.48		915	2874.56	657,555	965	3031.64	
866	2720.62		916	2877.70	658,993	966	3034.78	732,899
867	2723.76		917	2880.84	660,433	967	3037.92	734,417
868	2726.90		918	2883.98	661,874	968	3041.06	735,937
869	2730.04		919	2887.12	663,317	969	3044.20	737,458
870	2733.19		920	2890.27	664,761	970	3047.34	738,981
871	2736.33		921	2893.41	666,207	971	3050.49	740,506
872	2739 - 47	597,204	922	2896.55	667,654	972	3053.63	742,032
873	2742.61		923	2899.69	669,103	973	3056.77	743,559
874	2745.75	599,947	924	2902.83	670,554	974	3059.91	745,088
875	2748.89		925	2905.97	672,006	975	3063.05	746,619
876	2752.04		926	2909.11	673,460	976	3066.19	748,151
877	2755.18	604,073	927	2912.26	674,915	977	3069.34	749,685
878	2758.32		928	2915.40	676,372	978	3072.48	751,221
879	2761.46		929	2918.54	677,831	979	3075.62	752,758
880	2764.60		930	2921.68	679,291	980	3078.76	754,296
881	2767.74	609,595	931	2924.82	680,752	981	3081.90	755,837
882	2770.88		932	2927.96	682,216	982	3085.04	757,378
883		612,366	933	2931.11	683,680	983	3088.19	758,922
884	2777.17		934	2934.25	685,147	984	3091.33	760,466
885 886	2780.31		935	2937.39	686,615	985	3094.47	762,013
887		616,534	936	2940.53	688,084	986	3097.61	763,561
888	2786.59		937	2943.67	689,555	987	3100.75	765,111
	2789.73		938	2946.81	691,028	988	3103.89	766,662
889	2792.88		939	2949.96	692,502	989	3107.04	768,214
890		622,114	940	2953.10	693,978	990	3110.18	769,769
891	2799.16		941	2956.24	695,455	991	3113.32	771,325
892		624,913	942	2959.38	696,934	992	3116.46	772,882
893		626,315	943	2962.52	698,415	993	3119.60	774,441
894	2808.58		944	2965.66	699,897	994	3122.74	776,002
895		629,124	945	2968.81	701,380	995	3125.88	777,564
896	2814.87		946	2971.95	702,865	996	3129.03	779,128
897		631,938	947	2975.09	704,352	997	3132.17	780,693 782,260
898		633,348	948	2978.23	705,840	998	3135.31	
899	2024.29	634,760	949	2981.37	707,330	999	3130.45	783,828

Natural Trigonometric Functions

M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.00000	1,0000	0.00000	Infinite	1.0000	Infinite	0.00000	1.00000	60
I	.00029	.0000	.00029	3437.7	.0000	3437.7	.00000	0.99971	
2	.00058	.0000	,00058	1718.9	.0000	1718.9	.00000	.99942	59 58
3	.00087	,0000	.00087	1145.9	,0000	1145.9	,00000	.99913	57
4	.00116	.0000	.00116	859.44	.0000	859.44	.00000	.99884	56
3	0.00145	1.0000	0.00145	687.55	1.0000	687.55	0,00000	0.99854	55
5	.00174	.0000	.00174	572.96	.0000	572.96	,00000	.99825	54
7	.00204	.0000	.00204	491.11	,0000	491.11	,00000	.99796	53
7 8	.00233	.0000	.00233	429.72	,0000	429.72	.00000	.99767	52
9	.00262	.0000	.00262	381.97	,0000	381.97	.00000	.99738	51
10	0.00291	0.99999	0.00291	343.77	1,0000	343.77	0.00000	0.99709	50
II	.00320	-99999	.00320	312.52	.0000	312.52	.00000	.99680	49
12	.00349	-99999	.00349	286.48	.0000	286.48	100001	.99651	48
13	.00378	.99999	.00378	264.44	.0000	264.44	100001	.99622	47
14	.00407	.99999	.00407	245.55	.0000	245.55	.00001	.99593	46
15	0.00436	0.99999	0.00436	229.18	1.0000	229.18	0.00001	0.99564	45
15	.00465	.99999	.00465	214.86	.0000	214.86	.00001	.99534	44
17	.00494	.99999	.00494	202.22	,0000	202.22	.00001	.99505	43
18	.00524	•99999	.00524	190.98	.0000	190.99	.00001	.99476	42
19	.∞553	.99998	.00553	180.93	.0000	180.93	.00001	-99447	41
20	0.00582	0.99998	0.00582	171.88	1.0000	171.89	0.00002	0.99418	40
21	.00611	.99998	.00611	163.70	.0000	163.70	.00002	.99389	39
22	.00640	.99998	.00640	156.26	.0000	156.26	.00002	.99360	38
23	.00669	.99998	.00669	149.46	.0000	149.47	.00002	.99331	37 36
24	.00698	•99997	.00698	143.24	.0000	143.24	0.00003	0.99302	35
25 26	0.00727	0.99997	0.00727	137.51	1,0000	137.51	.00003		
	.00756	99997	.00756	132.22	.0000	132.22		.99244	34 33
27 28	.00785	99997	.00785	127.32	.0000	127.32	.00003	.99215	32
29	.00814		.00814		.0000	118.54	.00003	.99156	31
30	0.00873		0.00873	118.54 114.59	1.0000	114.59	0.00004	0.99127	30
31	,00902		.00902	114.39	.0000	110.90	.00004	.99098	29
32	.00902		.00931	107.43	.0000	107.43	.00004	.99069	28
33	.00960		.00950		.0000	104.17	.00005	.99040	27
34	.00989		.00989		,0000	IOI.II	.00005	.99011	26
35	0.01018		0.01018		1.0000	98.223	0.00005	0.98982	25
36	.01047	99994	.01047	95.489	.0000	95.495	.00005	.98953	24
	.01076		.01076	92.908	.0000	92.914	.00006	.98924	23
37 38	.01105		.01105		.0001	90.469	.00006	.98895	22
39	.01134		.01134		.0001	88.149	,00006	.98865	21
40	0.01163		0.01164	85.940	1.0001	85.916	0.00007	0.98836	20
41	.01193		.01193	83.843	.0001	83.849	.00007	.98807	19
42	.01222		.01222		.0001	81.853	.00007	.98778	18
43	.01251	.99992	.01251		.0001	79.950	.00008	.98749	17
44	.01280	.99992	.01280		1000.	78.133	.00003	.98720	16
4.5	0.01300		0.01309		1.0001	76.396	0.00008	0.98691	15
46	.01338		.01338		.0001	74.736	.00009	.98662	14
47 48	.01367	.99991	.01367		10001	73.146	.00009	.98633	13
	.01396		.01396		.0001	71.622	.00010	.98604	12
49	.01425		.01425		10001	70.160	.00010	.98575	II
50	0.01454	0.99989	0 01454		1.0001	68.757	0.00010	0.98546	10
51	.01483		.01484	67.402	.0001	67.409	.00011	.98516	9 8
52	.01512		.01513	66.105	.0001	66.113	.00011	.98487	7
53	.01542	.99988	.01542		1000.	63.664	.00012	.98429	7 6
54	0.01571		0.01571		1.0001	62.507	0.00013	0.93400	5
55 56	.01629		.01629		,0001	61.391	.00013	.93371	4
57	.01658		.01629		.0001	60.314	.00013	.98342	3
57 58	.01687	.99986	.01687	59.266	.0001	59.274	.00014	.98313	2
50	.01716	.99935	.01716		10001	58.270	.00015	.98284	ī
59 60	0.01745		0.01745		1.0001	57.299	0.00015	0.98255	0
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

Natural Trigonometric Functions 178°

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.01745	0.99985	0.01745	57.290	1.0001	57.299	0.00015	0.98255	60
I	.01774	.99984	.01775	56.350	.0001	56.359	.00016	.98226	
2	.01803	.99984	.01804	55.441	1000.	55.450	.∞∞16	.98196	59 58
3	.01832	.99983	.01833	54.561	.0002	54.570	.00017	.98167	57
4	.01861	.99983	.01862	53.708	.0002	53.718	.00017	.98138	56
5 6	0.01891	0.99982	0.01891	52.882 52.081	1.0002	52.891 52.090	0.00018	0.98109	55 54
7	.01949	.99981	.01949	51.303	.0002	51.313	.00019	.98051	53
7 8	.01978	.99980	.01978	50.548	.0002	50.558	.00019	.98022	52
9	.02007	.99980	.02007	49.816	.0002	49.826	.00020	.97993	51
10	0.02036	0.99979	0.02036	49.104	1.0002	49.114	0.00021	0.97964	50
11	.02065	.99979	.02056	48.412	.0002	48.422	.00021	-97935	49 48
12	.02094	.99978	.02095	47 - 739	.0002	47.750	.00022	.97906	48
13	.02123	·99977	.02124	47.085 46.449	.0002	47.095 46.460	.00022	.97877	47 46
15	0.02131	0.99976	0.02132	45.829	1.0002	45.840	0.00024	0.97818	45
16	,02210	.99975	.02211	45.226	.0002	45.237	.00024	.97789	44
17	.02240	-99975	.02240	44.638	.0002	44.650	.00025	.97760	43
18	.02269	-99974	.02269	44.056	.0002	44.077	.00026	.97731	42
19	.02298	-99974	.02298	43.508	.0003	43.520	.00026	.97702	41
20	0.02326	0.99973	0.02327	42.964	1.0003	42.976	0.00027	0.97673	40
2I 22	.02356	.99972 .99971	.02357	42.433	.0003	42.445 41.923	.00028	.97644 .97615	39 38
23	.02305	.99971	.02330	41.410	.0003	41.423	.00028	.97586	37
24	.02443	.99970	.02444	40.917	.0003	40.930	.00030	.97557	36
25	0.02472	0.99959	0.02473	40.435	1.0003	40.443	0.00030	0.97528	35
26	.02501	.99969	.02502	32.955	.0003	39.973	.00031	97499	34
27	.02530	.99963	.02531	39.506	,0003	39.513	.00032	.97469	33
28	.02559	.99967	.02550	39.057	.0003	39.059	.∞33	.97440	32
29	.02539	.99966	.02539	38.618	.0003	38.631	.00033	.97411	31
30	0.02618	0.99966	0.02618	38.188	1.0003	38.201	0.00034	0.97382	30
3I 32	.02647	.99965 .99964	.02648	37.769 37.358	.0003	37.782	.00035	.97353 .97324	29 28
33	.02705	.99963	.02706	36.956	.0001	37.37I 36.969	.00036	.97324	27
24	.02734	.99963	.02735	36.563	.0004	36.576	.00037	.97266	26
24 35	0.02763	0.99962	0.02764	36.177	1.0004	36.191	0.00033	0.97237	25
36	.02792	.99961	.02793	35.800	.0004	35.814	.00039	.97208	24
37	.02821	.99960	.02322	35.431	.0004	35.445	.00040	.97179	23
38	.02850	•99959	.02851	35.069	1,0001	35.084	.00041	.97150	22
39	.02879	.99958	.02880	34.715	10001	34.729	.00041	.97121	2I 20
40 41	0.02908	0.99958 99957	0.02910	34.368	1.0004	34.382	0.00042	0.97091 .97062	19
42	.02967	.99955	.02963	33.693	.0004	33.708	.00044	.97033	18
43	.02996	99955	.02907	33.356	.0024	33.381	.00045	.97004	17
44	,03025	99054	.03025	33.045	.0004	33.060	.00046	.96975	16
45	0.03054	0.99953	0.03055	32.730	1.0005	32.745	0.00046	0.95946	15
46	.03083	-99952	.03034	32.421	.0005	32.437	.00047	.96917	14
47	.03112	.99951	.03113		.0005	32.134	.00048	.96888	13
48	.03141	.99951	.03143	31.820 31.528	.0005	31.836 31.544	.00050	.96859 .96830	12 11
50	0.03170	0.99349	0.03201	31.325	1.0005	31.544	0.00051	o.96301	10
51	.03228	.99948	.03230	30.960	.0005	30.976	.00052	.96772	ا و
52	.03257	-99947	.03259	30.683	.0005	30.699	.00053	.96743	9 8
53	.03286	.99946	.03283	30.411	.0005	30.423	.00054	.96713	7
54	.03315	-99945	.03317	30.145	.0005	30.161	.00055	.96634	6
55 56	0.03344	0.99944	0.03346	29.832	1.0005	29.899	0.00056	0.96655	5
50	.03374	-99943	.03375	29.624	.0006	29.641 29.388	.00057	.96626 .96597	4
57 58	.03403	.99942	.03405	29.37I 29.122	.0006	29.335	.00059	.96568	3 2
50	.03461	.99940	.03463	23.877	.0006	23.834	.00060	.96530	ī
59 60	0.03490	0.99939	0.03492	28.636	1.0006	28.654	0.00061	0.96510	
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

Natural Trigonometric Functions

2°			Natural	Trigono	metric F	unctions			177°
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.03490	0.99939	0.03492	28,636	1.0006	28.654	0,00061	0.96510	60
1	.03519	.99938	.03521	28.399	.0005	28.417	,00002	.96481	59
2	.03548	-99937	.03550	28.166	.0006	28.134	.00063	.96452	58
3	.03577	.99936	.03579	27.937 27.712	.0006	27.955 27.730	.00064	.96423	57 56
4	0.03635	.99935 0.99934	0.03638	27.490	1.0007	27.508	0.00066	0.96365	55
5 6	. 03664	.99933	.03667	27.271	.0007	27.290	.00067	.96336	54
7 8	.03693	.99932	.03696	27.056	.0007	27.075	.00068	.96306	53
	.03722	.99931	.03725	26.845 26.637	.0007	26.864	.00069	.96277	52
9	0.03751	.99930 o.99928	0.03754	26.432	1.0007	26.655 26.450	.00070 0.0007I	.96248 0.96219	51 50
II I	.03310	.99927	.03812	26.230	.0007	26.249	.00073	.96190	49
12	.03839	.99926	.03842	26.031	.0007	26.050	.00074	.96161	48
13	.03868	.99925	.03871	25.835	.0007	25.854	.00075	.96132	47
14	.03397	.99924	.03900	25.642	.0008 1.0008	25.661	0.00077	.96103 0.96074	46
15	0.03925 .03955	0.99923	.03929	25.452 25.264	.0008	25.47I 25.234	.00078	.96045	45 44
17	.03984	.99921	.03937	25.080	.0008	25.100	.00079	.96016	43
18	.04013	.99919	.04016	24.898	.0008	24.918	.∞∞30	.95987	42
19	0.04042	.99918	0.04045	24.718	.0008 I.0008	24.739 24.562	0.00082	.95958 0.95929	41 40
20	.04100	.99917	.04104	24.542	.0003	24.388	.00084	.95900	39
22	.04129	.99915	.04133	24.196	.0008	24.216	.00035	.95870	38
23	.04158	.99913	.04162	24.026	.0009	24.047	.00086	.95841	37
24	.04137	.99912	.04191	23.859	.0009	23.830	.00038	.95812	36
25 26	.04217	.99911	.04249	23.694	1.0009	23.716 23.553	0.000\$9	0.95783 -95754	35 34
27	.04275	.99908	.04279	23.372	.0000	23.393	.00091	.95725	33
28	.04304	.99907	.04303	23.214	.0009	23.235	.00093	.95696	32
29	.04333	.99906	.04337	23.058	.0009	23.079	.00094	.95667	31
30	0.04362		0.04366	22.904	1.0009	22.925	0.00095	0.95638	30 29
32	.04391	.99903	.04395	22.752 22.602	.0010	22.774	.00030	.95609 .95580	28
33	.04449	.99901	.04453	22.454	.0010	22.476	.00099	.95551	27
34	.04478	.999∞	.04483	22.303	.0010	22.330	.00100	.95522	26
35	0.04507	0.99898	0.04512	22.164	1.0010	22.136	0.00102	0.95493	25
36	.04536	.99897	.04541	22.022 21.881	.0010	22.044 21.904	.00103	.95464 .95435	24 23
37 38	.04594	.99894	.04599	21.742	.0010	21.765	.00106	.95405	22
39	.04623	.99893	.04628	21.606	1100.	21.629	.00107	.95376	21
40	0.04652		0.04657	21.470	1.0011	21.494	0.00103	0.95347	20
41	.04681	.99890	.04637	21.337	1100.	21.360	01100.	.95318	19 18
43	.04711		.04710	21.205	.0011	21.223	.00111	.95260	17
44	.04769	.99886	.04774	20.946	.0011	20.970	.00114	.95231	16
45	0.01798	0.99385	0.04803	20.819	1.0011	20.843	0.00115	0.95202	15
46	.04827	.99883 .99882	.04332	20.693	.0012	20.717	.00116	.95173	I4 I3
47 48	.04885	.99881	.04891	20.446	.0012	20.593	.00113	.95144	13
49	.04914	.99879	.04920	20.325	.0012	20.350	.00121	.95036	II
50	0.04943	0.99878	0.04949	20,205	1.0012	20,230	0.00122	0.95057	10
51	.04972	.99876	.04978	20.087	.0012	20.112	.00124	.95028	9
52 53	.05030	.99875 .99873	.05007	19.970	,0012	19.995	.00125	.94999	
54	.05059	.99872	.05066	19.740	.0013	19.766	.00128	.94941	7 6
55	0.05088	0.99870	0.05095	19.627	1.0013	19.653	0.00129	0.94912	5
56	.05117	.99869	.05124	19.515	.0013	19.541	.00131	.94883	4
57 58	.05146	.99867 .99866	.05153	19.405	.0013	19.431 19.322	.00132	.94853	3 2
59	.05204	.99864	.05212	19.183	.0013	19.322	.00135	.94795	ī
59 60	0.05234	0.99863	0.05241	19.081	1.0014	19.107	0.00137	0.94766	0
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

3° Natural Trigonometric Functions

176°

M 	Sine	Cosine	Tan.	C-4	C .	C	77 0:	1	
				Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
	0.05234	0.99863	0.05241	19.081	1.0014	19,107	0.00137	0.94766	60
1 1	.05263	.99861	.05270	18.975	.0014	19.002	.00138	.94737	59
2	.05292	.99860	.05299	18.871	.0014	18.897	.00140	.94708	58
3	.05321	. 99858	.05328	18.768	.0014	18.794	.00142	.94679	57
4	.05350	.99857	.05357	18.665	.0014	18.692	.00143	.94650	56
5	0.05379	0.99855	0.05387	18.564	1.0014	18.591	0.00145	0.94621	55
6	.05408	. 99854	.05416	18.464	.0015	18.491	.∞146	.94592	54
7 8	.05437	. 99852	.05445	18.365	.0015	18.393	.00148	.94563	53
	.05466	.99850	.05474	18.268 18.171	.0015	18.295 18.198	.00149	.94534	52
9 10	.05495 0.05524	0.99847	0.05503	18.075	1.0015	18.103	0.00151	.94505 0.94476	51 50
II	.05553	.99846	.05562	17.980	.0015	18.008	.00154	.94447	49
12	.05582	99844	.05591	17.886	.0016	17.914	.00156	.94418	48
13	.05611	99842	.05620	17.793	.0016	17.821	.00157	.94389	47
14	.05640	.99841	.05649	17.701	.0016	17.730	.00159	.94360	47 46
15	0.05669	0.99839	0.05678	17.610	1.0016	17.639	0.00161	0.94331	45
16	.05698	.99837	.05707	17.520	.0016	17.549	.00162	.94302	44
17	.05727	.99836	.05737	17.431	.∞16	17.460	.00164	.94273	43
18	.05756	.99834	.05766	17.343	.0017	17.372	.00166	.94244	42
19	.05785	.99832	.05795	17.256	1.0017	17.285	.00167	.94214	41
20 2I	.05814	.99831	0.05824	17.169	.0017	17.198	0.00169	0.94185 .94156	40
22	.05872	.99827	.05883	16.999	.0017	17.113	.00171	.94127	39 38
23	.05902	.99826	.05912	16.915	.0017	16.944	.00174	.91098	37
24	.05931	.99824	.05941	16,832	.0018	16.861	.00176	.94069	36
25	0.05960	0.99322	0.05970	16.750	1.0018	16.779	0.00178	0.94040	35
26	. 05989	.99320	.05999	16.668	.0018	16.698	.00179	.94011	34
27	.06018	.99319	.06029	16.587	.0018	16.617	18100.	.93982	33
28	.06047	.99817	.06058	16.507	.0018	16.538	.∞183	-93953	32
29	.06076	.99815	.06087	16.428	.0018	16.459	.00185	.93924	31
30	0.06105	0.99813	0.06116	16.350	1.0019	16.380	0.00186	0.93895	30
31	.06134 .06163	.99812	.06145	16.272	.0019	16.303 16.226	.00188	.93866	29 28
32 33	.06192	.99308	.06204	16.119	.0019	16.150	.00190	.93537 .938c8	27
33	.06221	.99806	.06233	16.043	.0019	16.075	.00192	.93777	26
35	0.06250	0.99804	0.06262	15.969	1.0019	16.000	0.00195	0.93750	25
35 36	.06279	.99803	.06291	15.894	.0020	15.926	.00197	.93721	24
37	. 06308	.99801	.06321	15.821	.0020	15.853	.00199	.93692	23
37 38	.06337	.99799	.06350	15.748	.0020	15.780	.00201	.93663	22
39	. 06366	-99797	.06379	15.676	.0020	15.708	.00203	.93634	21
40	0.06395	0.99795	0.06408	15.605	1.0020	15.637	0.00205	0.93605	20
41	.06424	.99793	.06437	15.534	.0021	15.566	.00206	.93576	19
42	.06453	.99791	.06467	15.464	.0021	15.496	.00208	-93547	18
43 44	.06482	.99790	.06496	15.394 15.325	.0021	15.427 15.358	.00210	.93518	17 16
44	0.06540	0.99786	0.06554	15.257	1.0021	15.290	0.00214	0.93460	15
46	.06569	.99784	.06583	15.189	.0022	15.222	.00216	.93431	14
	.06598	.99782	.06613	15.122	.0022	15.155	.00218	.93402	13
47 48	.06627	.99780	.06642	15.056	.0022	15.089	.00220	.93373	12
49	.06656	.99778	.06671	14.990	.0022	15.023	.00222	.93343	11
50	0.06685	0.99776	0.06700	14.924	1.0022	14.958	0.00224	0.93314	10
51	.06714	.99774	.06730	14.860	.0023	14.893	.00226	.93285	9 8
52	.06743	.99772	.06759	14.795	,0023	14.829	.00228	.93256	8
53	.06772	.99770	.06788	14.732	.0023	14.765	.00230	.93227	7 6
54	0.06830	.99768	0.06346	14.606	I.0023	14.702	0.00231	0.93169	5
55 56	.06859	.99764	.06876	14.544	.0024	14.578	.00235	.93140	4
57	.06888	.99762	.06905	14.482	.0024	14.517	.00237	.93111	3
57 58	.06918	.99760	.06934	14.421	.0024	14.456	.00239	.93082	2
59	. 06947	. 99758	.06963	14.361	.0024	14.305	.00241	.93053	1
60	0.06976	0.99756	0.06993	14.301	1.0024	14.335	0,00243	0.93024	
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

930

Natural Trigonometric Functions

4.	Natural Trigonometric Functions								
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.06976	0.99756	0.06993	14.301	1.0024	14.335	0.00243	0.93024	60
I	.07005	99754	.07022	14.241	.0025	14.276	.00246	.92995	59
2	.07034	.99752	.07051	14.182	.0025	14.217	.00248	.92966	59 58
3	.07063	.99750	.07080	14.123	.0025	14.159	.00250	.92937	57
4	.07092	.99748	.07110	14.065	.0025	14.101	.00252	.92908	56
5	0.07121	0.99746	0.07139	14.008	1.0025	14.043	0.00254	0.92879	55
6	.07150	.99744	.07168	13.951	.0026	13.986	.00256	.92850	54
7 8	.07179	.99742	.07197	13.894	.0026	13.930	.00258	.92821	53
	.07208	.99740	.07226	13.838	.0026	13.874	.00260	.92792	52
9	.07237	. 99738	.07256	13.782	.0026	13.818	.00262	.92763	51
10	0.07266	0.99736	0.07285	13.727	1.0026	13.763	0.00264	0.92734	50
11	.07295	.99733	.07314	13.672	.0027	13.708	.00266	.92705	49
12	.07324	.99731	.07343	13.617	.0027	13.654	.00268	.92676	48
13	.07353	.99729	.07373	13.563	.0027	13.600	.00271	.92647	47
14	.07332	.99727	.07402	13.510	.0027	13.547	.00273	.92618	46
15	0.07411	0.99725	0.07431	13.457	1.0027	13.494	0.00275	0.92589	45
16	.07440	.99723	.07460	13.404	.0028	13.441	.00277	.92560	44
17	.07469	.99721	.07490	13.351	.0028	13.389	.00279 .00281	.92531	43 42
18	.07498	.99718	.07519	13.299 13.248	.0028	13.337 13.286	.00281	.92502	42 4I
19	.07527	.99716	.07548	13.197	1.0020	13.235	0.00286	0.92444	40
20	0.07556	.99712	0.07577	13.146	.0029	13.184	.00288	.92415	39
22	.07535		.07636	13.140	.0029	13.134	.00200	.92386	38
23	.07643	.99710	.07665	13.046	.0029	13.084	.00290	.92357	37
23	.07672	.99707	.07694	12.996	.0029	13.034	.00295	.92328	36
25	0.07701		0.07724	12.947	1.0030	12.985	0.00297	0.92299	35
26	.07730		.07753	12.898	.0030	12.937	,00299	.92270	34
27	.07759	.99698	.07782	12.849	.0030	12.838	.00301	.92241	33
28	.07788	.99696	.07812	12.801	.0030	12.840	.00304	.92212	32
29	.07817	.99694	.07841	12.754	.0031	12.793	.∞306	.92183	31
30	0.07846		0.07870	12.706	1.0031	12.745	0.00308	0.92154	30
31	.07375	.99689	07899	12.659	.co31	12.698	.00310	.92125	29
32	.07904	.99687	.07929	12.612	.0031	12.652	.00313	.92096	28
33	.07933		.07958	12.566	.0032	12.606	.00315	.92067	27
34	.07962	.99682	.07987	12.520	.0032	12.560	.00317	.92038	26
35	0.07991		0.08016	12.474	1.0032	12.514	0.00320	0.92009	25
35 36	.08020	99678	.08046	12.429	.0032	12.469	.00322	.91980	24
37	.03049	.99675	.08075	12.384	.0032	12.424	.00324	.91951	23
38	.08078	.99673	.08104	12.339	.0033	12.379	.00327	.91922	22
39	.08107		.08134		.0033	12.335	.00329	.91893	21
40	0.03136		0.08163		1.0033	12.291	0.00331	0.91864	20
41	.08165		.08192	12.207	.0033	12.248	.00334	.91835	19
42	.08194	.99664	.08221		.0034	12.204	.00336	.91806	18
43	.08223		.08251		.0034	12.161	.00339	.91777	17
44	.08252		.08280		.0034	12.118	.00341	.91748	16
45 46	0.08281		0.08309		1.0034	12.076	0.00343	0.91719	15
40	.08310		.08339		.0035	12.034	.00346	.91690	14
47 48	.03339	.99652	.c8363		.0035	11.932	.00348	.91661	13
	.08368		.08397	11.909	.0035	11.950	.00351	.91632	12 11
49	.08397		.08426	11.867	.0035	11.909	.00353	.91603	10
50	0.08426	0.99644	0.08456	11.826	1.0036	11.838	0.00356	0.91574	
51	.08455	.99642	.08485	11.785	.0036	11.525	.00358	.91545 .91516	9
52	.08484		.08514	11.745	.0036		.00363	.91516	
53	.08513		.08544		.0030	II.747 II.707	.00365	.91458	7 6
54	0.08571		0.08602		1.0037	11.668	0.00368	0.91429	5
55 56	,08600		.08632		.0037	11.628	.00370	.91429	4
50	.08629		.08661	11.546	.0037	11.589	.00373	.91371	3
57 58	.08658	.99624	.08690	11.540	.0037	11.550	.00375	.91342	2
59	.03637	.99622	.08719	11.463	.0038	11.512	.00378	.91313	ī
60	0.08715	0.99619	0.08749	11.430	1.0033	11.474	0.00380	0.91284	ō
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
-	0.08715	0.99619	0.08749	11.430	1,0038	11.474	0,00380	0.91284	60
ī	.03744	.99017		II.392	.0033	11.436	,00333	.91255	
2	.08773	.99514	.03773	11.354	.0039	11.393	.003\$6	.91226	59 58
	.08302	.99612	.08337	11.316	.0039	11.360	.00388	.91197	57
3 4 5 6	.08831	.93609	.08366	11.279	.0039	11.323	.00391	.91168	57 55
5	0.08360	0.99607	0.08395	II.242	1.0039	11.286	0.00393	0.91139	55
6	.08389	.99604	.08925	11.205	.0040	11.249	.00396	.01110	54
7 8	.08918	.99601	.03954	11.168	.0010	11.213	.00398	.91082	53
8	.03947	99599	.08933	11.132	.0040	11.176	.00401	.91053	52
9	.08976	.99596	.09013	11.095	.0040	11.140	,00101	.91024	51
10	0.09005	0.99594	0.09042	11.059	1.0041	11.104	0.00406	0.90995	50
11	.09034	.99591	.09071	11.024	.0041	11.069	.00409	.90966	49
12	.09063	.99588	10100.	10.938	.0041	11.033	.00411	.90937	49 48
13	.09092	.99536	.09130	10.953	.0041	10.998	.00414	.90903	47
14	.09121	. 99583	.09159	10.918	.00.12	10.963	.00417	.90379	46
15	0.09150	0.99530	0.09189	10.883	1.0042	10.929	0.00419	0.90850	45
16	.09179	.99578	.09218	10.848	.0042	10.894	.00422	.90821	44
17	.09203	-90575	.09247	10.814	.0043	10.860	.00425	.90792	43
18	.09237	.99572	.09277	10.780	.0043	10.826	.00427	.90763	42
19	.09263	.99570	.09306	10.746	.0043	10.792	.00430	.90734	41
20	0.09295	0.93567	0.09335	10.712	1.0043	10.758	0.00433	0.90705	40
21	.09324	99564	.09365	10.673	.0044	10.725	.∞436	.90676	39
22	.09353	.99562	.09394	10.645	.0044	10.692	.00438	.90647	38
23	.09332	•99559	.09423	10.612	.0044	10.659	.00441	.90618	37 36
24	.09411	.99556	.09453	10.579	.0044	10.626	.00444	.90589	36
25	0.09440	0.99553	0.09432	10.546	1.0045	10.593	0.00446	0.90560	35
26	.09469	.99551	.09511	10.514	.0045	10.561	.00449	.90531	34
27	.09498	. 99548	.09541	10.481	.0045	10.529	.00452	.90502	33
28	.09527	· 9 9545	.09570	10.449	.0046	10.497	.00455	.90473	32
29	.09556	.99542	.09599	10.417	.0046	10.465	.00458	.90444	31
30	0.09584	0.99540	0.09629	10.335	1.0046	10.433	0.00460	0.90415	30
31	.09613	99537	.09658	10.354	.0046	10.402	.00463	.90385	29 28
32	.09642	99534	.09638	10.322	.0047	10.371	.00466	.90357	
33 34	.09671	.90531	.09717	10.291	.0047	10.340	.00469	.90328	27
34	.09700	.99528	.09746	10.260	.0047	10.309	.00472	.90300	26
35 36	0.09729	0.99525	0.09776	10.229	1.∞48	10.278	0.00474	0.90271	25
30	.09758	•99523	.09305	10.199	.0048	10.248	.00477	.90242	24
37 38	.09787	.99520	.09834	10.168	.0048	10.217	.00480	.90213	23
30	.09316	.90517	.09364	10.133	.0048	10.187	.00433	.90184	22 21
39	.09845	.99514	.09393	10.108	.0049	10.157	.00486	.90155	20
40	0.09874	0.90511	0.09922	10.078	1.0049	10.127	0.00409	0.90126	
41	.09903	.90508	.09752	10.048	.0049	10.093	.00491	.90007	19
42	.09932	.90505	.09781	10.019	.0050	10.063	.00494	.90068	10
43	.09961	.99503	.10011	9.9393 9.9601	.0050	10.039	.00497	.90039	17 16
44	0.10019	.99500 0.99497	0.10040	9.9310	1.0050	9.9812	0.00503	0.89981	15
45 46	.10043	99494	.10099	9.9310	.0051	9.9512	.00506	.89952	14
47	.10043	.99494	.10128	9.8734	.0051	9.9323	.00509	.89932	13
47 48	.10106	.99491	.10123	9.8448	.0051	9.8955	.00512	.89394	12
49	.10134	. 99435	.10136	9.8164	,0052	9.8672	.00512	.89393	11
50	0.10163	0.99482	0.10216	9.7332	1.0052	9.8391	0.00518	0.89336	10
51	.10192	99479	.10246	9.7601	.0052	9.8112	.00521	.89307	-6
52	.10221	.99479	.10240	9.7322	.0053	9.7834	.00524	.89779	9
53	.10250	99473	.10305	9.7044	.0053	9.755\$.00527	.89750	7
54	. 10279	.99470	.10334	9.6763	.0053	9.7283	.00530	.89731	7
55	0.10308	0.90467	0.10353	9.6493	1.0053	9.7010	0.00533	0.89692	5
56	.10337	99464	.10393	9.6220	.0054	9.6730	.00536	.89553	5
57	.10366	.99461	.10422	9.5242	.0054	9.6463	.00539	.89534	3
58	.10395	.97453	.10452	9.5579	.0054	9.6200	.00542	.80505	2
59	.10424	.97455	.10431	9.5411	.0015	9.5033	.00545	826	ī
59 60	0.10453	0.99452	0.10510	9.5144	1.0055	9.5660	0.00543	0.85547	ō
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	м

MATHEMATICAL TABLES Natural Trigonometric Functions

173°

•				Matural	11120110	meule I	ancions.			1.0
	M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
-	•	0.10453	0.99452	0.10510	9.5144	1.0055	9.5663	0,00548	0.89547	60
	ī	10432	.99449	.10540	.4878	.0055	.5404	.00551	.89518	
- 1	2	.10511	.99446	.10569	.4614	.∞56	.5141	.00554	.89489	59 58
	3	.10540	-99443	.10599	4351	.∞56	.5141	.00557	.89460	57
	4	.10568	.99440	.10628	.4090	.∞56	.4620	.∞560	.89431	56
- 1	5	0.10597	0.99437	0.10657	9.3831	1.0057	9.4362	0.00563	0.59402	55
	6	.10626	•99434	.10637	-3572	.0057	.4105	.∞566	.89373	54
- 1	7	.10655	·9943I	.10716	.3315	.0057	.3850	.∞569	.89345	53
-		.10684	.99428	.10746	.3060	.0057	.3596	.00572	.89316	52
	9 10	.10713	.99424	.10775	.2806	.0058	-3343	.00575	.89287	51 50
- 1	11	0.10742	0.9942I .99418	.10834	9.2553	1.0058 .0058	9.3092	0.00579 .00582	0.89258 .89229	49
- 1	12	.10771	.99415	.10863	.2051	.0059	.2593	.00585	.89229	48
- 1	13	.10829	.99413	.10893	.1803	.0059	.2346	.00588	.89171	47
- 1	14	.10858	.99409	,10922	.1555	.0059	2100	.00591	.89142	46
- 1	15	0.10887	0.99406	0.10952	9.1309	1,0060	9.1855	0.00594	0.89113	45
- 1	16	.10916	99402	.10981	.1064	.0060	.1612	.00597	.89084	44
	17	.10944	99399	.11011	.0821	.0060	.1370	.00601	.89055	43
- 1	18	.10973		.11040	.0579	.0061	.1129	.00604	.89026	42
	19	.11002		.11069	.0338	.0061	.0890	.00607	.88998	41
- 1	20	0.11031		0.11099	9.0098	1.0061	9.0651	0.00610	0.88969	40
- 1	2I 22	.11060	.99386	.11128	8.9860	.0062	.0414	.00613	.88940 .88911	39 38
		.11089	.99383	.11158	.9623	.0062	.0179	.00617	.88882	
	23 24	.11118	.99380	.11217	.9387	.0063	8.9944	.00623	.88853	37 36
- 1	25	0.11176	99377 0.99373	0.11246	8.8918	1.0063	8.9479	0.00626	0.88824	35
- 1	26	.11205		.11276	.8686	.0063	.9248	.00630	.88795	34
- [27	,11234		.11305	.8455	.0064	9018	.00633	.88766	33
	28	.11262		.11335	.8225	.0064	.8790	.00636	.88737	32
- [29	.11291	.99360	.11364	.7996	.0064	.8563	.00639	.88708	31
1	30	0.11320	0.99357	0.11393	8.7769	1.∞65	8.8337	0.00643	0.88680	30
- 1	31	.11349		.11423	.7542	.0065	.8112	.∞646	.88651	29
- 1	32	.11378		.11452	.7317	.0065	.7838	.00619	.88622	28
	33	.11407		.11482	.7093 .6870	.0066	.7665	.00653	.88593 .88564	27 26
	34 35	.11436 0.11465		0.11541	8.6648	1.0066	.7444 8.7223	0.00659	0.88535	25
- 1	36	.11494		.11570	.6427	.0067	.7004	.00653	.88506	21
	37	.11523		.11600	.6208	.0067	.6786	,00666	.88477	23
	38	.11531		.11629	.5989	.0067	.6569	,00669	.88448	22
	39	.11530		.11659	.5772	.0068	.6353	.00673	.88420	21
- 1	40	0.11609		c.11688	8.5555	1.0068	8.6138	0.00676	0.88391	20
- 1	4 I	.11638		.11718	5340	.0068	.5924	.00679	.88362	19
- 1	42	.11667		.11747	,5126	.0069	.5711	.00683	.88333	13
- 1	43	.11696		.11777	.4913	.0069	•5499	.00686	.88304	17
- 1	44	.11725		.11806	.4701	.0069	.5289 8.5079	0.00690	.88272 0.88246	16 15
	45 46	0.11754		0.11836	8.4489 .4279	1.0070	.4871	.∞696	.88217	14
	47	.11811		.11895	.4070	.0070	.4663	.00700	.88188	13
	48	.11840		.11924	.3862	.0071	-4457	.00703	.88160	12
- 1	49	.11869		.11954	.3655	.∞71	.4251	.00707	.88131	11
- 1	50	0.11898		0.11983	8.3449	1.0071	8.4046	0.00710	0.88102	10
	51	.11927	.99286	.12013	.3244	.0072	.3843	.00714	.88073	9 8
- 1	52	.11956		.12042	.3040	.0072	.3640	.00717	.88044	
	53	.11985		.12072	.2837	.0073	.3439	.00721	.88015	7 6
	54	.12014		.12101	.2635	.0073	.3238	.00724	.87986	ō
	55 56	0.12042		0.12131		1.0073	8.3039	0.00728	0.87957 .87928	5
		.12071		.12100	.2234	.0074	.2642	.00735	.87920	3
- 1	57 58	.12120		.12190	.1837	.0074	.2446	.00733	.87871	2
	59	12158	.99258	.12249	.1640	.0075	.2250	.00742	.87842	ī
-	5 9 6 0	0.12187		0.12278	8.1443	1.0075	8.2055	0.00745	0.87813	ō
1	М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

96°

60

Natural Trigonometric Functions

Vrs. Sin. Vrs. Cos. M Sine Cosine Tan. Cotan. Secant Cosec. M ٥ 0.12187 0.99255 0.12278 8.1443 1.0075 8.2055 0.00745 0.87813 60 .0075 .0076 . 1861 59 58 1 .12216 .99251 . 12308 .1248 .00749 .87787 . 1668 .87755 2 .99247 . 1053 .00752 .12245 .12337 3 .12273 .99244 . 12367 .0860 .0076 . 1476 .00756 .87726 57 56 .0667 .0076 .1285 .87697 4 .12302 .99240 . 12396 .00760 5 0.12331 0.99237 0.12426 8.0476 1.0077 8.1094 0.00763 0.87669 55 .12360 .12456 .0285 .0077 .0905 .00767 .87640 54 .99233 . 12389 .0078 87611 7 .99229 . 12485 .0095 .00770 53 .0717 .99226 .00774 8 .12418 .12515 7.9906 .0078 .0529 .87582 52 q . 12447 .99222 .12544 .0078 .0342 .00778 .87553 51 .9717 IO 0.12476 0.99219 0.12574 7.9530 1.0079 8.0156 0.00781 0.87524 50 .0079 .87495 11 .12504 .99215 .12603 .9311 7.9971 .00785 49 .12633 .0079 .00788 87467 48 12 .12533 .99211 .9158 .9787 13 .99208 .12662 .8973 .00792 . 12562 .0080 .0604 .87438 47 .9421 14 .12591 .99204 .12692 .8789 .0080 .00796 .87400 46 7.8606 1.0030 0.12620 0.99200 0.12722 7.9240 0.00799 0.87380 45 15 .9059 16 .12649 .8424 .00803 .87351 .99197 .12751 .0081 44 . 12678 .8243 .8379 .00807 .87322 17 .99193 .12781 .0081 43 .8062 18 .99189 .12810 .0082 .8700 .00810 87293 .12706 42 .12840 .7882 .0082 .8522 .00814 .87265 19 .12735 .99186 41 20 0.12764 0.99182 0.12869 7.7703 1.0082 7.8344 0.00818 0.87236 40 21 .99178 .12899 .0033 .8163 .00822 .87207 39 38 .12793 -7525 .12822 .87178 22 .99174 .12928 .7348 .0083 .7992 .00825 .12958 .0084 .7817 .12851 .00829 .87149 23 .99171 .7171 37 .6996 7.6821 .7642 .99167 36 24 .12879 . 12938 .0084 .00833 .87120 25 0.12908 0.99163 0.13017 1.0084 7.7469 0.00837 0.87091 35 26 .99160 .00840 .13047 .6646 .0085 .7296 .87063 .12937 34 27 .12966 .99156 .13076 .6473 .0085 .00844 .87034 .7124 33 .6300 .0085 .00848 87005 28 .13106 .6953 .12995 .99152 32 .6129 .0086 .6783 29 .99148 .13136 .00852 .86976 31 .13024 1,0086 0.86947 30 0.13053 0.99144 0.13165 7.5957 7.6613 0.00855 30 .86918 .13081 .5787 .0087 .00859 29 28 31 .6444 .99141 .13195 32 .13110 .99137 .13224 .5617 .0087 .6276 .00863 .86390 .0087 .00867 86861 33 .13139 .99133 . 13254 .5149 .6108 27 . 13168 99129 . 13284 .5285 34 .0088 . 5942 .00871 .86832 26 35 36 0.13197 7.5776 .5611 0.99125 0.13313 7.5113 1.0088 0.00875 0.86803 25 ,00878 .13226 .4946 .0089 .86774 .99121 .13343 24 .4780 .86745 37 38 .13254 .99118 .13372 .0089 .5446 .00882 23 .0089 .5282 .00886 86717 .13283 .99114 .4615 22 . 13402 39 .00890 86688 .13312 .99110 .13432 .445I .0000 .5119 21 0.00894 0.86559 40 0.13341 0.99106 0.13461 7.4287 1,0000 7.4957 -20 .86630 .00898 41 .13370 .99102 .13491 .4124 .0000 .4795 19 42 .3961 .99098 .13520 .0091 ,4634 ,00902 866c1 18 .13399 86572 43 .13427 .99094 .13550 .3800 .0001 .4474 .00905 17 86544 .13456 ,99090 .13580 .3639 .0092 16 44 .4315 ,00909 0.86515 45 46 0.13485 0.99086 0.13609 7.3479 1.0092 7.4156 0.00913 15 .3998 .3840 .86486 .13639 .13514 .99083 .3319 .0092 .00917 1.1 , 13569 86457 47 48 .3160 .0093 .13543 .99079 .00921 13 .13698 .99075 .3002 .3683 .86428 .13571 .0093 .00925 12 86400 49 .99071 .13728 .2844 .0094 .3527 .13600 .00929 II 7.2687 0.86371 0.13629 0.99067 0.13757 1.0094 7.33720.00933 10 50 51 . 13658 .99063 .13787 .2531 .0094 .3217 .00937 .86312 98 .13817 .3063 .86313 52 . 13687 .99059 .2375 .0095 .00941 53 .13716 .99055 .13846 .2220 .0095 .2909 .00945 .86284 76 54 .13744 .99051 .13876 .2066 .0006 .2757 .00949 86255 55 0.13773 7.2604 0.86227 0.99047 0.13906 7.1912 1.0006 0.00953 5 .1759 .1607 .00957 .86198 .13802 .99043 .13935 .0097 . 2453 4 57 58 . 13831 .0097 .86160 .99039 .13965 2302 .00961 3 . 13860 ,00065 .86140 .93035 .13995 .1455 ,0097 .2152 2 . 13888 .00960 86111 59 60 .99031 . 14024 . 1304 .0003 ,2002 I 0.99027 7.1154 1.0098 7.1853 0.00973 0.86083 0 0.13917 O. I4054 M Cosine Sine Cotan. Tan. Cosec. Secant Vrs. Cos. Vrs. Sin. M

172°

171°

8°	Natural Trigonometric Functions								
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.13917	0.99027	0.14054	7.1154	1.0098	7.1853	0.00973	0.86083	60
I	13946	.99023	14084	.1004	.0099	.1704	.00977	.86054	
2	.13975	.99019	.14113	.0854	.0099	.1557	.00981	.86025	59 58
3	.14004	.99015	.14143	.0706	.0099	.1409	.00935	.85996	57 56
4	.14032	.99010	.14173	.0558	.0100	.1263	.00989	.85967	56
4 5 6	0.14061	0.99006	0.14202	7.0410	1.0100	7.1117	0.00993	0.85939	55
0	14090	.99002	.14232	.0264	.0101	.0972	.∞998	.85910	54
7 8	.14119	.98998	.14262	.0117	.0101	.0827	.01002	.85881	53
9	.14148	.98994	.14291	6.9972	.0102	.0683	.01006	.85852	52
10	.14176 0.14205	0.98990	0.14321	.9827 6.9682	.0102 1.0102	7.0396	0.01010	.85823 0.85795	51 50
111	.14234	.98982	.14380	.9538	.0103	.0254	81010.	.85766	49
12	.14263	.98978	.14410	.9395	.0103	.0112	.01022	.85737	48
13	.14292	.98973	.14440	.9252	.0104	6.9971	.01026	.85708	47
14	.14320	.98969	.14470	.9110	.0104	.9830	.01031	.85679	46
15	0.14349	0.98965	0.14499	6.8969	1.0104	6.9690	0.01035	0.85651	45
16	.14378	.98961	.14529	.8828	.0105	.9550	.01039	.85622	44
17	.14407	.98957	.14559	.8687	.0105	.9411	.01043	.85593	43
18	.14436	.98952	.14588	.8547	.0106	.9273	.01047	.85564	42
19	.14464	.98948	.14618	.8408	.0106	.9135	.01052	.85536	41
21	0.14493 .14522	0.98944 .98940	.14648	6.8269 .8131	1.0107	6.8998 .8861	0.01056	0.85507	40
22	.14551	.98936	.14707	.7993	.0107	.8725	.01060	.85478 .85449	39 38
23	.14579	.98931	.14737	.7856	.0108	.8589	.01068	.85420	37
24	.14608	.98927	14767	.7720	.0108	.8454	.01073	.85392	36
25 26	0.14637	0.98923	0.14796	6.7584	1.0109	6.8320	0.01077	0.85363	35
	.14666	.98919	.14826	.7448	.0109	.8185	.01081	.85334	34
27	.14695	.98914	.14856	.7313	.0110	.8052	.01085	.85305	33
28	.14723	.98910	.14886	.7179	.0110	.7919	.01090	.85277	32
29	.14752	.98906	.14915	.7045	.0111	.7787	.01094	.85248	31
30	0.14781	0.98901	0.14945	6.6911	1.0111	6.7655	0.01093	0.85219	30
31 32	.14810 .14838	.98897	.14975	.6779	.0111	.7523 .7392	.01103	.85190 .85161	29 28
33	.14867	.98889	.15034	.6514	.0112	.7262	.01111	.85133	27
34	14896	.98884	.15064	.6383	.0113	.7132	.01116	.85104	26
35	0.14925	0.98880	0.15094	6.6252	1.0113	6.7003	0.01120	0.85075	25
36	.14953	.98876	.15123	.6122	.0114	.6874	.01124	.85046	24
37	.14982	.98871	.15153	.5992	.0114	.6745	.01129	.85018	23
38	.15011	.98867	.15183	.5863	.0115	.6617	.01133	.84989	22
39	.15040	.98862	.15213	.5734	.0115	.6490	.01137	.84960	21
40 41	0.15068	0.98858 .98854	0.15243	6.5605	1.0115	6.6363	0.01142	0.84931	20 19
42	.15097 .15126	.98849	.15302	.5478 .5350	.0116	.6237	.01146	.84903	13
43	.15155	.98845	.15332	.5223	.0117	.5985	.01155	.84845	17
44	.15183	.98840	.15362	.5097	.0117	.5860	.01159	.84816	16
45	0.15212	0.98836	0.15391	6.4971	1.0118	6.5736	0.01164	0.84788	15
46	.15241	.98832	.15421	.4845	.0118	.5612	.01168	84759	14
47	.15270	.98827	.15451	.4720	.0119	.5488	.01173	. 34730	13
48	.15298		.15481	.4596	.0119	.5365	.01177	.2 1701	12
49	.15328	.98818	.15511	.4472	.0119	.5243	.01182	.84672	II
50	0.15356	0.98814	0.15540	6.4348	1.0120	6.5121	0.01186	0.84644	10
51 52	.15385	.98809	.15570	.4225	.0120	.4999	.01190	.84615 .84586	9
53	.15442	.98800	.15630	.3980	.0121	.4757	.01193	.84558	7
54	.15471	.98796	.15659	.3859	.0122	.4637	.01204	.84529	7 6
55	0.15500	0.98791	0.15689	6.3737	I.0122	6.4517	0.01208	0.84500	5
56	.15528	.98787	.15719	.3616	.0123	.4398	.01213	.84471	5 4 3 2
57	.15557	.98782	.15749	.3496	.0123	.4279	.01217	.84443	3
58	15586	.98778	.15779	.3376	.0124	.4160	.01222	.84414	
59	.15515	.98773	.15809	.3257	.0124	.4042	.01227	.84385	I
60	0.15643	0.98769	0.15838	6.3137	1.0125	6.3924	0.01231	0.84356	<u> </u>
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

90

Natural Trigonometric Functions

170°

A.			Natural	Ingono	metric F	unctions			170°
M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
0	0.15643	0.98769	0.15838	6.3137	1.0125	6.3924	0.01231	0.84356	60
i	.15672	.98764	.15868	.3019	.0125	3807	.01236	.84328	
2	15701	98760	.15898	.2901	.0125	.3690	.01240	.84299	59 5 8
3	.15730	.98755	.15928	.2783	.0126	-3574	.01245	.84270	57
1 4 1	.15758	.98750	.15958	.2665	.0126	.3458	.01249	.84242	57 56
5 6	0.15787	0.98746	0.15987	6.2548	1.0127	6.3343	0.01254	0.84213	55
6	.15816	.98741	.16017	.2432	.0127	.3228	.01259	.84184	54
8	.15844	.98737	.16047	.2316	.0128	.3113	.01263	.84155	53
	. 15873	.98732	.16077	.2200	.0128	.2999	.01268	.84127	52
9	.15902	.98727	.16107	.2085	.0129	.2885	.01272	.84098	51
10	0.15931	0.98723	0.16137	6.1970	1.0129	6.2772	0.01277	0.84069	50
12	15959 .15988	.98714	.16196	.1856	.0130	.2659	.01282	.84041	49 48
13	.15933	.98709	.16226	.1628	.0130	.2434	.01230	.83983	47
14	.16045	.93704	.16256	.1515	.0131	.2322	.01296	.83954	46
15	0.16074	0.98700	0.16286	6.1402	1.0132	6.2211	0.01300	0.83926	45
16	.16103	.98695	.16316	.1290	.0132	.2100	.01305	.83597	44
17	.16132	.98690	.16346	.1178	.0133	.1990	.01310	.83868	43
18	.16160	.98635	.16376	.1066	.0133	.1330	.01314	.83840	42
19	.16189	.98631	.16405	.0955	.0134	.1770 6.1651	.01319	.83811	41
20	0.16218		0.16435	6.0844	1.0134		0.01324	0.83782	40
21	.16246	.93671	.16465	.0734	.0135	.1552	.01328	.83753	39
22	.16275	.98667	.16495	.0624	.0135	.1443	.01333	.83725	38
23	. 16304	.98662	.16525	.0514	.0136	.1335	.01338	.83696	37
24	. 16333 0. 16361	.98657	.16555	6.0296	.0136	6.1120	.01343	.83667	36
25 26	.16390	0.98652 .98648	0.16585	.0188	1.0136 .0137	,1013	0.01347	0.83639 .83610	35 34
27	.16419	.98643	.16644	.0080	.0137	.0906	.01357	.83581	33
28	.16447	.98638	.16674	5.9972	.0138	.0800	.01362	.83553	32
29	16476	.98633	.16704	.9865	.0138	.0694	.01367	.83524	31
30	0.16505	0.98628	0.16734	5.9758	1.0139	6.0538	0.01371	0.83495	30
31	. 16533	.98624	.16764	.9651	.0139	.0483	.01376	.83466	29
32	.16562	.98619	.16794	-9545	.0140	.0379	.01381	.83438	28
33	.16591	.98614	.16824	.9439	.0140	.0274	.01386	.83409	27 26
34	. 16619	.98609	.16854	-9333	.0141	.0170	.01391	.83380	26
35 36	0.16648	0.98604	0.16884	5.9228	1.0141	6.0066	0.01395	0.83352	25
30	.16677 .16705	.986∞	.16914	.9123	.0142	5.9963 .9860	.01400	.83323 .83294	24 23
37 38	.16734	.98595 .98590	.16944	.8915	.0143	.9758	.01410	.83266	22
39	.16763	.98585	.17003	.8811	.0143	.9655	.01415	.83237	21
40	0.16791	0.98530	0.17033	5.8708	1,0144	5.9554	0.01420	0.83208	20
41	.16320	.98575	17063	.8605	.0144	.9452	.01425	.83180	19
42	.16349	.98570	.17093	.8502	.0145	.9351	.01430	.83151	18
4.3	.16878	.98565	.17123	.8400	.0145	.9250	.01434	.83122	17
44	.16906	.98560	.17153	.8298	.0146	.9150	.01439	.83094	16
45	0.16935	0.98556	0.17183	5.8196	1.0146	5.9049	0.01444	0.83065	15
46	.16964	.98551	.17213	.8095	.0147	.8950	.01449	.83036	14
47 48	. 16992	.98546	.17243	.7994	.0147	.8850	.01454	.83008 .82979	13
43	.17021	.98541	.17273	.7894	.0148	.8751 .8652	.01459	.82979	12
50	0.17078		0.17333	.7794 5.7694	1.0149	5.8554	0.01469	0.82922	10
51	.17107	.98526	.17363	-7594	.0150	.8456	.01474	.82893	
52	.17136	.98521	.17393	7495	.0150	.8358	.01479	.82864	9 8
53	.17164	.98516	.17423	.7396	.0151	.8261	.01484	.82836	7 6
54	.17193	.98511	.17453	.7297	.0151	.8163	.01489	.82807	6
55 56	0.17221	0.98506	0.17483	5.7199	1.0152	5.8067	0.01494	0.82778	5 4 3 2
56	.17250	.98501	.17513	.7101	.0152	.7970	.01499	.82750	4
57	.17279	.98496	.17543	.7004	.0153	.7874	.01504	.82721	3
58	.17307	.98491	.17573 .17603	.6906	.0153	.7778	.01509	.82692	2 I
59 60	.17336 0.17365	.98486 0.98481	0.17633	.6309 5.6713	1.0154	.7683 5.7588	0.01514	.82664 0.82635	0
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

990

100			Naturai	Tugono	metric F	unctions			169
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
0	0.17365	0.98481	0.17633	5.6713	1.0154	5.7588	0.01519	0.82635	60
i	.17393	.98476	.17663	.6616	.0155	.7493	.01524	.82606	59
2	.17422	.98471	.17693	.6520	.0155	.7398	.01529	.82578	59 58
3	. 17451	.98465	.17723	.6425	.0156	.7304	.01534	.82549	57 56
4	.17479	.98460	.17753	.6329	.0156	.7210	.01539	.82521	56
5 6	0.17508	0.93455	0.17783	5.6234	1.0157	5.7117	0.01544	0.82492	55
6	.17537	.98450	.17813	.6140	.0157	.7023	.01550	.82463	54
7 8	. 17565	.98445	.17843	.6045	.0158	.7023 .6930 .6838	.01555	.82435	53
9	.17594 .17522	.98440	.17873	.5951 .5857	.0158	.6745	.01565	.82406 .82377	52 51
10	0.17651	0.98430	0.17933	5.5764	1.0159	5.6653	0.01570	0.82349	50
111	.17680	.98425	.17963	.5670	.0160	.6561	.01575	,82320	49
12	.17708	.98419	.17993	.5578	.0160	.6470	.01580	.82291	48
13	.17737	.98414	.18023	.5485	.0161	.6379	.01585	.82263	47 45
14	.17766	.98409	.18053	-5393	.0162	.6238	.01591	.82234	45
15	0.17794	0.98404	0.18083	5.5301	1.0162	5.6197	0.01596	0.82206	45
16	.17823	.98399	.18113	.5209	.0163	.6107	.01601	.82177	44
17	.17852	.98394	.13143	.5117	.0163	.6017	.01606	.82148	43
18	.17830	.98388	.18173	.5026 .4936	.0164	.5928	.01611	.82120 .82001	42 41
20	0.17937	0.98378	0.18233	5.4845	1.0165	5.5749	0.01622	0.82062	40
21	.17966	.98373	,18263	.4755	.0165	.5660	,01627	.82034	30
22	17995		.18293	.4665	.0166	.5572	.01632	.82005	39 38
23	.18023		. 13323	-4575	.0166	.5484	.01638	.81977	37
24	. 18052	.98357	. 18353	.4486	.0167	.5396	.01643	.81948	37 36
25	0.18080	0.98352	0.18383	5.4396	1.0167	5.5308	0.01648	0.81919	35
26	.18109		.18413	.4308	.0158	.5221	.01653	.81891	34
27	.18138	.98341	.18444	.4219	.0169	.5134	.01659	.81862	33
28 29	.18166	.98336 .98331	. 18474	.4131	.0169	.5047 .4960	.01664	.81834 .81805	32
30	0.18223		0.18534	5.3955	1.0170	5.4874	0.01674	0.81776	31 30
31	.18252		.18564	.3868	.0171	.4788	.01680	.81748	20
32	.18281	.98315	.18594	.3780	.0171	.4702	.01685	.81719	29 28
33	.18309	.98309	.18624	.3694	.0172	.4617	.01690	.81691	27 26
34	.18338	.98304	.18654	.3607	.0172	.4532	.01696	.81662	
35 36	0.18366	0.93299	0.18684	5.3521	1.0173	5.4417	0.01701	0.81633	25
36	.18395		.18714	-3434	.0174	.4362	.01706	.81605	24
37 38	.13424		.18745	.3349	.0174	.4278	.01712	.81576	23
39	.18452		.18775	.3263	.0175	.4194	.01717	.81548 .81519	22 21
40	0.13509		0.18335	5.3093	1.0176	5.4026	0.01728	0.81490	20
41	.18538	.93267	.18365	.3008	.0176	-3943	.01733	.81462	19
42	.18567	.93261	.18895	.2923	.0177	.3560	.01739	.81433	18
43	.18595		.18925	.2839	.0177	-3777	.01744	.81405	17
44	.18624		.18955	.2755	.0178	.3695	.01749	.81376	16
45 46	0.18652	0.98245	0.18985	5.2671	1.0179	5.3612	0.01755	0.81348	15
46	.18681	.98240	.19016	.2538	.0179	.3530	.01760	.81319	14
47	.18709	.98234	.19046	.2505	.0180	-3449	.01766	.81290	13
48	.18738	.98229	.19076	.2422	.0180	.3367 .3286	.01771	.81262 .81233	I2 II
49 50	0.18795	0.98218	0.19136	5.2257	1.0131	5.3205	0.01777	0.81205	10
51	.18824	.98212	.19166	.2174	.0182	.3124	.01788	,81176	
52	18352	.93207	.19197	2092	.0182	.3044	.01793	.81147	8
53	.18831	.93201	.19227	.2011	,0183	.2963	.01799	.81119	98 76 5 4 3
54	.18909	.98196	.19257	.1929	.0134	.2933	.01804	.81090	6
55 56	0.13938	0.93190	0.19287	5.1848	1.0184	5.2803	0.01810	0.81062	5
56	.18967	.93185	.19317	.1767	.0185	.2734	.01815	.81033	4
57 58	.18995	.93179	.19347	.1636	.0135	.2645	.01821	.81005	3
50	.19024	.93174	.19378	.1525	.0136	.2566 .2487	.01832	.8c976 .8c948	2 I
59 60	0.19031	0.98163	0.19433	5.1445	1.0187	5.2408	0.01837	0.80919	0
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

11°

4 * 00

110			Natura	Trigon	ometric I	functions	1		168
М	Sine	Cosine	Ten.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vra. Cos.	М
1 0	0.19081	0.98163	0.19438	5.1445	1.0187	5.2408	0.01837	0.80919	60
I	.19109	.98157	. 19468	.1366	.0188	.2330	.01843	.80390	59 58
2	.19138	.98152	.19498	.1286	.0188	.2252	.01848	.80862	58
3	.19166	.98146	.19529	.1207	.0139	.2174	.01854	.80833	57 56
4	.19195	.98140	.19559	.1128	.0139	.2097	.01859	.80805	56
4 5 6	0.19224	0.98135	0.19589	5.1049	1.0190	5.2019	0.01865	0.80776	55
0	.19252	.98129	.19619	.0070	.0191	.1942	.01871	.80748	54
7 8	.19281	.98124	.19649	.0392	.0191	.1865	.01876	.80719	53 52
9	.19309	.98118	.19580	.0814	.0192	.1788	.01882	.80691	52
10	.19338 0.19366	0.98107	0.19710	.0736 5.0658	.0192	.1712	.01837	.80662 0.80634	51 50
II	. 19395	.98107	.19770	.0581	1.0193	5.1636	0.01893	.80605	40
12	.19423	.98095	.19800	.0504	.0193	.1434	.01994	.80576	49 48
13	.19452	.98090	.19831	.0427	.0195	.1409	.01910	.80548	47
14	.19480	.98084	.19851	.0350	.0195	.1333	.01916	.80519	47 46
15	0.19509	0.93078	0.19891	5.0273	1.0196	5.1258	0.01921	0.80491	45
16	.19537	.98073	.19921	.0197	.0196	.1183	.01927	.80462	44
17	.19566	98067	.19952	.0121	.0197	.1109	.01933	.80434	43
18	.19595	.98061	.19982	.0045	.0198	.1034	.01938	.80405	42
19	.19623	.98056	.20012	4.9959	.0198	. 0 960	.01944	.80377	41
20	0.19552	0.98050	0.20042	4.9894	1.0199	5.0886	0.01950	0.80348	40
21	.19680	.98044	.20073	.9819	.0199	.0812	.01956	.80320	39
22	.19709	.98039	.20103	.9744	.0200	.0739	.01961	.80291	38
23 24	.19737	.98033	.20133	.9569	.0201	.0666	.01967	.80263	37
25	0.19766	0.98021	0.20194	.9594 4.9520	1.0202	5.0520	0.01973	,80234 0.80206	36 35
26	.19823	.98016	.20224	.9446	.0202	.0447	.01984	.80177	34
27	.19851	.98010	.20254	.9372	.0203	.0375	.01990	.80149	33
28	19880	.98004	.20285	.9298	.0204	.0302	.01996	.80120	32
29	.19908	.97998	. 20315	.9225	.0204	.0230	.02002	.80092	31
30	0.19937	0.97992	0.20345	4.9151	1.0205	5.0158	0.02007	0.80063	30
31	.19965	.97987	.20375	.9078	.0205	.0087	.02013	.80035	29
32	.19994	.97981	.20406	.9006	.0206	.0015	.02019	,80006	28
33	.20022	.97975	.20436	.8933	,0207	4.9944	.02025	.79978	27 26
34	.20051	.97969	.20466	.8860	.0207	.9873	.02031	.79949	20
35 36	0.20079	0.97963	0.20497	4.8788	1.0208	4.9802	0.02037	0.79921	25 24
37	.20136	.97957	.20527	.8716	.0209	.9732 .9661	.02042	.79892 .79863	23
38	.20165	.97952	.20588	.8573	.0210	.9591	.02054	.79835	22
39	. 20193	.97940	.20618	.8501	.0210	.9521	,02060	.79807	21
40	0.20222	0.97934	0.20648	4.8430	1.0211	4.9452	0.02066	0.79778	20
41	.20250	.97928	.20679	.8359	.0211	.9382	.02072	.79750	19
42	.20279	.97922	.20709	.8283	.0212	.9313	.02078	.79721	18
43	. 20307	.97916	.20739	.8217	.0213	.9243	.02084	79693	17 16
44	. 20336	.97910	.20770	.8147	.0213	.9175	.02039	.79664	
45	0.20364	0.97904	0.20800	4.8077	1.0214	4.9106	0.02095	0.79636	15
46	. 20393	.97899	.20830	.8007	.0215	.9037	.02101	.79607	14
47 48	.20421	.97893	.20861	7937	.0215	.8969 .8901	.02107	-79579	13 12
49	.20450	.97881	.20891	.7867	.0216	.8833	.02113	.79550	11
50	0.20506	0.97875	0.20952	4.7728	1.0217	4.8765	0.02125	0.79493	10
51	.20535	.97869	20982	.7659	.0218	.8697	.02131	.79465	40
52	.20563	.97863	.21012	.7591	.0218	.8630	.02137	79436	9
53	.20592	.97857	,21043	.7522	.0219	.8563	.02143	.79428	7 6
54	.20620	.97851	.21073	-7453	.0220	.8496	.02149	-79379	6
55 56	0.20649	0.97845	0.21104	4.7385	1.0220	4.8429	0.02155	0.79351	5
56	.20677	.97839	.21134	.7317	.022f	.8362	.02161	.79323	4
57	.20706	.97833	.21164	.7249	.0221	.8296	.02167	.79294	4 3 2
58	.20734	.97827	.21195	.7181	.0222	.8229	.02173	.79266	
59	.20763	.97821	0.21225	.7114	.0223 I.0223	.8163 4.8097	0.02179	.79237	1 0
	0.20791	0.97815	0.21250	4.7046	1.0223	4.0097	0.02105	0.79209	
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M
<u> </u>			<u> </u>				·		

101°

Natural Trigonometric Functions

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
						. 0-0-			
0	0.20791	0.97815	0.21256	4.7046	1.0223	4.8097	0.02185	0.79209	60
I	.20820	.97809 .97803	.21286	.6979	.0224	.8032	.02191	.79180	59 58
3	.20846	.97797	.21316	.6845	.0225	.7900 .7901	.02197	.79152 .79123	50
3	.20070	.97790	.21377	.6778	.0225	.7835	.02203	.79123	57 56
4 5 6	0.20933	0.97784	0.21408	4.6712	1,0226	4.7770	0.02215	0.79066	55
6	.20962	.97778	.21438	.6646	.0227	.7706	,02222	.79038	54
7	.20990	.97772	.21468	.6580	.0228	.7641	.02228	.79010	53
7 8	.21019	.97766	.21499	.6514	.0228	.7576	.02234	.78981	52
9	.21047	97760	.21529	6448	,0229	.7512	.02240	.78953	51
10	0.21076	0.97754	0.21560	4.6382	1.0230	4.7448	0.02246	0.78924	50
II	.21104	.97748	.21590	.6317	.0230	.7384	.02252	.78896	49 48
12	.21132	.97741	.21621	.6252	.0231	.7320	.02258	.78867	48
13	.21161	.97735	.21651	.6187	.0232	.7257	.02264	.78839	47 46
14	.21189	.97729	.21682	.6122	.0232	.7193	.02271	.78811	
15	0.21218	0.97723	0.21712	4.6057	1.0233	4.7130	0.02277	0.78782	45
16	.21246	.97717	.21742	-5993	.0234	.7067	.02283	.78754	44
17	.21275	.97711	.21773	.5928	,0234	.7004	.02289	.78725	43
18	.21303	.97704	.21803	.5864	.0235	.6942	.02295	.78697	42 41
20	0.21360	0.97692	0.21864	4.5736	1.0236	4.6817	0.02302	0.78640	40
21	.21388	.97686	.21895	.5673	.0237	.6754	.02314	.78612	39
22	.21417	.97680	.21925	.5609	.0237	.6692	,02320	.78583	38
23	.21445	.97673	.21956	.5546	.0238	.6631	.02326	.78555	37
24	.21473	.97667	.21986	.5483	.0239	.6569	.02333	.78526	37 36
25	0.21502		0.22017	4.5420	1,0239	4.6507	0.02339	0.78508	35
26	.21530	.97655	.22047	-5357	.0240	.6446	.02345	.78470	34
27	.21559	.97648	,22078	.5294	.0241	.6385	.02351	.78441	33
28	.21587	.97642	.22108	.5232	.0241	.6324	.02358	78413	32
29	.21615	.97636	.22139	.5169	.0242	.6263	.02364	.78384	31
30	0.21644	0.97630	0.22169	4.5107	1.0243	4.6201	0.02370	0.78356	30
31	.21672	.97623	.22200	.5045	.0243	.6142	.02377	.78328	29 28
32	.21701	.97617	.22230	.4983	.0244	.6081	.02383	.78299	
33	.21729	.97611	.22261	.4921 .4860	.0245	.6021	.02389	.78271 .78242	27 26
34 35 36	0.21786	0.97598	0.22322	4.4799	1.0246	4.5901	0.02402	0.78214	25
26	.21814	.97592	.22353	4.4799	.0247	.5841	.02408	.78186	24
37	.21843	.97585	.22383	.4676	.0247	.5782	.02415	.78154	23
37 38	.21871	.97579	.22414	.4615	.0248	.5722	.02421	.78129	22
39	.21899	97573	. 22444	·4555	.0249	.5663	.02127	.78100	21
40	0.21928	0.97566	0.22475	4.4494	1.0249	4.5604	0.02434	0.78072	20
41	.21956	.97560	.22505	•4434	.0250	-5545	.02440	.78043	19
42	.21985	.97553	.22536	•4373	.0251	.5486	.02446	.78015	18
43	.22013	-97547	.22566	.4313	.0251	.5428	.02453	.77987	17
44	.22041	.97541	.22597	.4253	.0252	.5369	.02459	.77959	16
45	0.22070		0.22628	4.4194	1.0253	4.5311	0.02466	0.77930	15
46	.22098	.97528	.22658	.4134	.0253	-5253	.02472	.77902	14
47 48	.22120	.97521	.22039	.4074	.0254	.5195	.02479	.77873	13 12
49	.22183	.97508	.22750	.3956	.0255	.5079	.02401	.77817	II
50	0,22211	0.97502	0,22781	4.3897	1.0256	4.5021	0.02498	0.77788	10
51	.22240		.22811	3838	.0257	.4964	.02504	.77760	
52	.22268	97489	.22842	.3779	.0257	.4907	.02511	.77732	9
53	.22297	.97483	.22872	.3721	.0258	.4850	.02517	.77703	7
54	.22325	.97476	.22903	.3662	.0259	.4793	.02524	.77675	7 6
55 56	0.22353		0.22934	4.3604	1.0260	4.4736	0.02530	0.77647	5 4 3 2
56	.22382		.22964	.3546	.0260	.4679	.02537	.77618	4
. 57	.22410		.22995	.3488	.0261	4623	.02543	.77590	3
58	.22438		.23025	.3430	.0262	.4566	.02550	.77561	2 I
59 60	.22467		.23056	.3372	.0262	.4510	.02556	•77533	0
1-00	0.22495	0.97437	0.23087	4.3315	1.0263	4.4454	0.02563	0.77505	
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos	Vrs. Sin.	M
	'		1		1.1	1	11	1	

13°

11 Vrs. Sin. Vrs. Cos. Sine Cosine Tan. Cotan. Secant Cosec. n 0.22475 0.97437 0.23087 4.3315 1.0263 4.4454 0.02563 0.77505 .77476 60 .0264 .02569 T .22523 .23117 .3257 59 58 .97430 .4398 .3200 2 .22552 .97424 .23143 .0264 .4342 .02576 .77448 .0255 3 .22530 .97417 .23179 .3143 .4237 .02583 .77420 57 56 . 22608 .3036 .0266 .02589 .97411 .23209 .4231 ·77391 0.22637 0.97404 0.23240 4.3029 1.0266 4.4176 0.02596 0.77363 5 55 .22665 .97398 .0267 .02602 .23270 .2972 .4121 .77335 54 .23301 .0268 .4065 .77306 78 .22693 .97391 .2916 .02600 53 .0268 .22722 .97384 .23332 .2859 .4011 .02616 .77278 52 .0269 .97378 .23363 .2803 .02622 9 .22750 .3956 .77250 51 10 0.22778 0.97371 0.23393 4.2747 1.0270 4.3901 0.02629 0.77221 50 .3847 .02535 11 .22807 .97364 .23424 .2691 .0271 .77193 49 48 12 .22835 .97338 -23455 .2635 .0271 .3792 .02612 .77165 ,22363 .3738 .3634 13 .9735I .23485 .2579 .0272 .02649 .77136 47 .22392 .23516 .02655 14 .97344 .2524 .0273 .77103 46 4.2468 15 16 0.22920 0.97338 0.23547 1.0273 4.3530 0.02562 0.77080 45 .22948 .23577 .02669 .9733I .2413 .0274 .3576 .77052 44 .2358 .0275 .02675 .77023 17 .22977 .97324 .3522 43 .76995 18 .23005 .23639 .0276 .3459 .02632 .97318 .2303 42 ,23670 .02689 .76957 .2248 .0276 19 .23033 .97311 .3415 41 0.02695 0.23061 1.0277 4.3352 20 0.97304 0.23700 4.2193 0.76938 40 .76938 .76382 21 ,23090 .97298 .23731 .2139 .0278 .3309 .02702 39 38 .2034 22 .23118 .23762 .0278 .3256 .02709 .97201 .23146 .97234 .2030 .3203 23 .23793 .0279 .02716 .75353 37 36 .76825 .1976 24 .23175 .97277 .3150 .02722 0.23354 1.0280 4.3098 0.02729 0.76797 .76769 25 0.23203 0.97271 4.1921 35 .1867 .97264 .23585 .0281 26 .23231 .3045 .02736 34 .0282 .76740 . 23260 .97257 .23916 .1814 .2993 .02743 27 33 28 .23283 .1760 .0233 .2941 .76712 .97250 .23946 .02749 32 .76584 29 .23316 .97244 .23977 .1706 4.1653 .0233 .2333 .02756 31 30 0,24008 1.0284 4.2836 0.02763 0.76655 0.23344 0.97237 30 31 .24039 .1600 .0235 .2785 .76527 .23373 .97230 .02770 29 32 .23401 .97223 .24069 .1546 .0235 .2733 .02777 .76599 28 .23120 .0286 .2631 27 .97216 .24100 .02783 .76571 33 .1493 .76542 34 .23458 .97210 .24131 .1440 .0287 .2630 .02790 26 0.23486 4.1388 1,0233 0.02737 0.76514 35 36 0.97203 0.24162 4.2579 25 .0288 .76486 .1335 .02304 24 .23514 .97196 .24192 .2527 .0289 .76457 37 33 .23542 .97189 .24223 .1282 .2476 .02311 23 .97182 .02318 .76429 .24254 .1230 .0290 .2425 .23571 22 .24285 .1178 .02824 .76401 39 .23599 .97175 .0291 .2375 21 0.76373 4.1126 0.02331 40 0.23627 0.9716) 1.0291 4.2324 20 .2273 .76344 . 23655 .97162 .24346 .1073 .0292 .02338 41 19 .76316 42 .23684 .97155 ,24377 .1022 .0293 .2223 .02845 18 .76283 .02352 .0970 .0293 .2173 43 .23712 .97143 .24408 17 16 44 .23740 .97141 .24439 .0018 .0294 .2122 .02859 .76260 0.02866 4.0867 1.0295 0.23768 0.76231 45 46 0.97134 0.24470 4.2072 15 .24501 .0815 .0296 .2022 .76203 .02873 .23797 .97127 11 .1972 .02880 47 .23825 .97120 .24531 .0764 .0296 .76175 13 .02336 48 .23853 .24562 .0713 .0297 .76147 .97113 .1923 12 .23331 .76118 49 .97106 .24593 .0662 .0298 .1873 .02893 11 4.0611 0.76090 50 0.23910 0.97099 0.24624 1.0299 4.1824 0,02900 10 .76062 .23938 .24555 .0560 .0299 .02907 51 .97092 .1774 9 .23366 .97086 .24636 .0509 .0300 .1725 76034 Ŕ 52 .02914 .1676 ,76005 53 .23094 .97079 .24717 .0458 .0301 .02921 76 54 . 24023 .97072 .24747 .0403 .0302 .1627 .02928 -75977 0.24778 0.02935 55 56 0,24051 0.97065 4.0358 1.0302 4.1578 0.75949 5 .0303 .02942 .24079 .97053 .0307 .1529 .7592I 4 .75332 57 58 .24107 .24810 .0257 .1481 .02949 .97051 .0304 3 .24871 .75354 .24136 .0305 .02956 .97044 .0207 .1432 ,24164 .97027 .0157 .0305 .75336 59 60 .24702 .1334 .02363 Ŧ 4.0108 1.0306 0.02970 0.75808 0.24192 0.97023 0.24933 4.1336 ٥ Cosine Sine Cotan. Tan. Cosec. Secant Vrs. Cos. Vrs. Sin.

166*

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.24192	0.97029	0.24933	4.0108	1,0306	4.1336	0.02970	0.75808	60
I	.24220	.97022	.24964	.0058	.0307	.1287	.02977	.75779	
2	.24249	.97015	.24995	.0009	.0308	.1239	.02984	.75751	59 58
3	.24277	.97008	.25025	3.9959	.0308	1911.	.02991	.75723	57
5 6	.24305	.97∞1	. 25056	.9910	.0309	.1144	.02999	.75695	56
5	0.24333	0.96994	0.25087	3.9861	1.0310	4.1096	0.03006	0.75667	55
0	. 24361	. 96987	.25118	.9812	.0311	.1048	.03013	.75638	54
8	.24390	.96980 .96973	.25149	.9763 .9714	.0311	.0953	.03020	.75610	53 52
9	.24418	.96966	.25211	.9665	.0312	.0906	.03027	.75554	51
10	0.24474	0.96959	0.25242	3.9616	1.0314	4.0859	0.03041	0.75526	50
II	.24502	.96952	.25273	.9568	.0314	.0812	.03048	.75497	49
12	.24531	.96944	.25304	.9520	.0315	.0765	.03055	.75469	49 48
13	.24559	.96937	.25335	.9471	.0316	.0718	.03063	.75441	47
14	.24587	.96930	.25366	.9423	.0317	.0672	.03070	.75413	46
15	0.24615		0.25397	3.9375	1.0317	4.0625	0.03077	0.75385	45
16	.24643	.96916	.25428	.9327 .9279	.0318	.0579	.03084	.75356	44
17	.240/2	.96901	.25459 .25490	.9279	.0319	.0532	.03091	.75328	43 42
19	.24728	.96894	.25521	.9184	.0320	.0440	.03095	.75300 .75272	41
20	0.24756	0.96887	0.25552	3.9136	1.0321	4.0394	0.03113	0.75244	40
21	.24784	.96880	.25583	.9089	.0322	.0348	.03120	.75215	39
22	.24813	.96873	.25614	.9042	.0323	.0302	.03127	.75187	39 38
23	.24841	.96865	.25645	.8994	.0323	,0256	.03134	.75159	37
24	.24369	.96858	.25676	.8947	.0324	.0211	.03142	.75131	36
25	0.24897	0.96851	0.25707	3.8900	1.0325	4.0165	0.03149	0.75103	35
26 27	.24925	.96844 .96836	.25738	.8853	.0326	.0120	.03156	.75075	34
28	.24953	.96829	.25800	.8760	.0327	.0029	.03163	.75046 .75018	33 32
29	.25010	.96822	.25831	.8713	.0328	3.9984	.03178	.74990	32 31
30	0.25038		0.25862	3.8667	1.0329	3.9939	0.03185	0.74962	30
31	.25066	.96807	.25893	.8621	.0330	.9894	.03192	.74934	29
32	.25094	.96800	.25924	.8574	.0330	.9850	.03200	.74906	28
33	.25122	.96793	.25955	.8528	.0331	.9805	.03207	.74877	27 26
34	.25151	.96785	.25986	.8482	.0332	.9760	.03214	.74849	
35	0.25179	0.96778	0.26017	3.8436	1.0333	3.9716	0.03222	.0.74821	25
36	.25207	.96771 .96763	.26048	.8390	.0334	.9672	.03229	.74793	24
37 38	.25235	.96756	.26110	.8345 .8299	.0334	.9583	.03236	.74765 .74737	23
39	.25291	.96749	.26141	.8254	.0336	.9539	.03244	.74709	21
40	0.25319	0.96741	0.26172	3.8208	1.0337	3.9495	0.03258	0.74680	20
41	.25348	.96734	.26203	.8163	.0338	.9451	.03266	.74652	19
42	.25376	.96727	.26234	.8118	.0338	.9408	.03273	.74624	18
43	.25404	.96719	.26266	.8073	.0339	.9364	.03281	.74596	17
44	.25432	.96712	.26297	.8027	.0340	.9320	.03288	.74568	16
45	0.25460	0.96704	0.26328	3.7983	1.0341	3.9277	0.03295	0.74540	15
46 47	.25488	.96697 .96690	.26359	.7938	.0341	.9234	.03303	.74512	14 13
48	.25510	.96682	.26421	.7848	.0342	.9190	.03318	.74455	13
49	.25573	.96675	.26452	.7804	.0343	.9104	.03325	.74427	11
50	0.25601	0.96667	0.26483	3.7759	1.0345	3.9061	0.03332	0.74399	10
51	.25629	.96660	.26514	.7715	.0345	.9018	.03340	.74371	9 8
52	.25657	.96652	. 26546	.7671	.0346	.8976	.03347	.74344	8
53	. 25685	. 96645	.26577	.7627	.0347	8933	.03355	.74315	6
54	.25713	. 96638	.26608	.7583	.0348	.8890	.03362	.74287	6
55 56	0.25741	0.96630	0.26639	3.7539	1.0349	3.8848	0.03370	0.74259	5
50	.25769	.96623	.26670	.7495 .7451	.0349	.8805 .8763	.03377	.74230	4 3
57 58	.25796	.96608	.26732	7407	.0351	.8721	.03392	.74202	3 2
59	.25854	.96600	.26764	.7364	.0352	.8679	.03392	.74146	î
59 60	0.25882	0.96592	0.26795	3.7320	1.0353	3.8637	0.03407	0.74118	0
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

104°

15° Natural Trigonometric Functions

164°

150			Natural	Irigon	metric F	unctions			164°
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
0	0.25882	0.96592	0.26795	3.7320	1.0353	3.8637	0.03407	0.74118	60
ī	.25910	.96585	.26826	.7277	.0353	.8595	.03415	.74090	59
2	.25938	.96577	.26857	.7234	.0354	.8553	.03422	.74062	58
3	.25966	.96570	.26883	.7191	.0355	.8512	.03430	.74034	57 56
1 4 1	.25994	.96562	.26920	.7147	.0356	.8470	.03438	.74006	56
5	0.26022	0.96555	0.26951	3.7104	1.0357	3.8428	0.03445	0.73978	55
6	.26050	.96547	.26982	.7062	.0358	.8337	.03453	-73949	54
7 8	.26078	.96540	.27013	.7019	.0358	.8346	.03460	.73921	53
	.26107	.96532 .96524	. 27044	.6976	.0359	.8304	.03468	.73893 .73865	52
9 10	.26135 0.26163	0.96517	.27076 0.27107	3.6891	1.0361	3.8222	.03475 0.03483	0.73837	51 50
11	.26191	.96509	.27138	.6848	.0362	.8181	.03491	.73809	40
12	.26219	.96502	.27169	.6806	.0362	.8140	.03498	.73781	49 48
13	26247	.96494	.27201	.6764	.0353	.8100	.03506	.73753	47
14	. 26275	.96486	.27232	.6722	.0364	.8059	.03514	.73725	46
15	0.26303	0.96479	0.27263	3.6679	1.0365	3.8018	0.03521	0.73697	45
16	.26331	.96471	.27294	.6637	.0366	.7978	.03529	. 73669	44
17 18	.26359	.96463	.27326	.6596	.0367	-7937	.03536	.73641	43
	.26387	.96456	.27357	.6554	.0367	.7897	.03544	.73613	42
19 20	.26415 0.26443	.96448	.27388	.6512 3.6470	.0368 1.0369	.7857 3.7816	0.03552	-73585	41
21	.26471	96433	.27419	.6429	.0370	.7776	.03567	0.73556 .73528	40
21	.26499	.96425	.27482	.6387	.0371	.7736	.03575	.73500	39 38
23	.26527	.96417	.27513	.6346	.0371	.7697	.03583	.73472	37
24	.26556	.96409	. 27544	.6305	.0372	.7657	.03590	.73444	36
25	0.26584	0.96402	0.27576	3.6263	1.0373	3.7617	0.03598	0.73416	35
26	.26612	.96394	.27607	.6222	.0374	.7577	.03506	.73388	34
27	26540	.96386	. 27638	.6181	.0375	.7538	.03614	.73360	33
28	.26663	.96378	. 27670	.6140	.0376	.7498	.03621	.73332	32
29	.26696	.96371	. 27701	.6100	.0376	.7459	.03629	.73304	31
30	0.26724	0.96363	0.27732	3.6059 .6018	1.0377	3.7420	0.03637	0.73276	30
31 32	.26752 .26780	.96355 .96347	.27764	.5977	.0378	.734I	.03645	.73248	29 28
33	.26808	.96340	.27826	.5937	.0379	7302	.03660	.73192	27
34	.26836	.96332	.27858	.5896	.0381	.7263	.03668	.73164	26
35	0,26364	0.96324	0.27889	3.5856	1.0382	3.7224	0.03676	0.73136	25
36	.26892	.96316	.27920	.5816	.0382	.7186	. 03684	.73108	24
37	.26920	.96308	. 27952	.5776	.0383	.7147	.03691	.73080	23
38	.26948	.96301	.27983	. 5736	.0384	.7108	.03699	.73052	22
39	.26976	.96293	.28014	. 5696	.0385	.7070	.03707	.73024	21
40	0.27004	0.96285	0.28046	3.5656	1.0386	3.7031	0.03715	0.72996	20
41	.27032	.96277	.28077	.5616	.0387	.6993	.03723	.72968	19 18
42 43	.27060 .27088	.96261	.28109	.5576 .5536	.0383	.6955	.03731	.72940	17
43	.27116	.96253	.28171	-5497	.0389	.6878	.03746	.72884	16
45	0.27144	0.96245	0.28203	3.5457	1.0390	3.6840	0.03754	0.72856	15
45 46	.27172	.96238	.28234	.5418	.0391	.6802	.03762	.72828	14
47	.27200	.96230	. 28266	.5378	.0392	.6765	.03770	.72800	13
48	.27228	.96222	. 28297	-5339	.0393	.6727	.03778	.72772	12
49	.27256	.96214	.28328	.5300	.0393	.6689	.03786	.72744	II
50	0.27284	0.96206	0.28360	3.5261	1.0394	3.6651	0.03794	0.72716	10
51	.27312	.96198	.28391	.5222	.0395	.6614	.03802	.72688	9 8
52	.27340	.96190	. 28423	.5183	.0396	.6576 .6539	.03818	.72660	🐧
53 54	.27396	.96132	. 28486	.5105	.0397	.6502	.03826	.72604	7 6
55	0.27424	0.96166	0.28517	3.5066	1.0399	3.6464	0.03834	0.72576	ا کا
55 56	.27452	.96158	.28549	.5028	.0399	.6427	.03842	.72548	5 4 3
57	.27480	.96150	.28580	. 4989	.0400	.6390	.03850	.72520	3 1
57 58	. 27508	.96142	. 28611	.4951	1040.	.6353	.03858	.72492	2
59 60	.27536	.96134	. 28643	.4912	.0402	.6316	.03866	.72464	1
60	0.27564	0.96126	0.28674	3.4874	1.0403	3.6279	0.03874	0.72436	0
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M
	[ll .	1	1		

Natural Trigonometric Functions

		Matural Ingonometric Punctions							
M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.27564	0.96126	0.28674	3.4874	1.0403	3.6279	0.03874	0.72436	60
ī	.27592	.96118	.28706	.4836	.0404	.6243	.03882	.72408	
2	.27620	.96110	.28737	.4798	.0405	.6206	.03890	72380	59 58
3	.27648	.96102	.28769	4760	.0406	.6169	.03898	.72352	57
4	.27675	.96094	.28300	.4722	.0406	.6133	.03906	.72324	57 56
5	0.27703	0.96086	0.28832	3.4684	1.0407	3.6096	0.03914	0.72296	55
6	.27,731	.96078	.28863	4646	.0408	.6060	.03922	.72268	54
7 8	.27759	.96070	.28895	.4608	.0409	.6024	.03930	.72240	53
	.27787	.96062	.28926	.4570	.0410	.5987	.03938	.72213	52
9	.27815	.96054	. 28958	-4533	.0411	.5951	.03946	.72185	51 50
11	.27843	0.96045 .96037	0.28990 .2902I	3.4495	1.0412	3.5915 .5879	.03954	0.72157	49
12	.27899	.96029	.29053	.4458	.0413	.5843	.03971	.72101	48
13	.27927	.96021	.29084	.4383	.0414	.5807	.03979	.72073	47
14	.27955	.96013	.29116	.4346	.0415	.5772	.03987	.72045	47 46
15	0.27983	0.96005	0.29147	3.4308	1.0416	3.5736	0.03995	0.72017	45
16	.28011	.95997	.29179	.4271	.0417	.5700	.04003	.71989	44
17	.28039	.95989	.29210	.4234	.0418	.5665	.04011	.71961	43
18	.28067	.95980	.29242	.4197	.0419	.5629	.04019	.71933	42
19	.28094	.95972	.29274	.4160	.0420	-5594	.04028	.71905	41
20	0.28122	0.95964	0.29305	3.4124	1.0420	3.5559	0.04036	0.71877	40
21	.28150	.95956	.29337	.4087	,0421	-5523	.04044	.71849	39
22	.28178	.95948	.29368	.4050	.0422	.5488	.04052	.71822	38
23	.28206	-95940	.29400	.4014	.0423	-5453	.04060	.71794	37 36
24 25	0.28262	.95931 0.95923	0.29432	-3977	.0424	.5418 3 .5383	0.04069	.71766 0.71738	35
26	,28290	.95915	.29495	3.3941 .3904	1.0425	.5348	.04085	.71710	34
27	.28318	.95907	.29526	.3868	.0420	.5313	.04003	.71682	33
28	.28346	.95898	.29558	.3832	.0428	.5279	.04101	.71654	32
29	.28374	.95890	.29590	-3795	.0428	.5244	.04110	.71626	31
30	0.28401	0.95882	0.29621	3.3759	1.0429	3.5209	0.04118	0.71608	30
31	.28429	.95874	.29653	.3723	.0430	.5175	.04126	.71570	29
32	.28457	.95865	.29685	.3687	.0431	.5140	.04134	.71543	28
33	.28485	.95857	.29716	.3651	.0432	.5106	.04143	.71515	27
34	.28513	.95849	.29748	.3616	.0433	.5072	.04151	.71487	26
35	0.28541	0.95840	0.29780	3.3580	1.0434	3.5037	0.04159	0.71459	25
36	.28569	.95832	.29811	-3544	.0435	.5003	.04168	.71431	24
37 38	.28597	.95824	.29843	.3509	.0436	.4969	.04176	.71403	23 22
39	.28652	.95807	.29906	-3473 -3438	.0437	.4935 .4901	.04193	.71375	21
40	0.28630	0.95799	0.29938	3.3402	.0438 1.0438	3.4867	0.04201	0.71320	20
41	.28708	.95791	.29970	.3367	.0439	.4833	.04209	.71292	19
42	.28736	.95782	.30001	.3332	.0439	.4799	.04218	.71264	18
43	.28764	95774	.30033	.3296	.0441	.4766	.04226	.71236	17 16
44	.28792	.95765	.30065	.3261	.0442	.4732	.04234	.71208	16
45 46	0.28820	0.95757	0.30096	3.3226	1.0443	3.4698	0.04243	0.71180	15
46	.28847	95749	.30128	.3191	.0444	.4665	.04251	.71152	14
47	.28875	.95740	.30160	.3156	.0445	.4632	.04260	.71125	13
48	.28903	.95732	.30192	.3121	.0446	.4598	.04268	.71097	12
49	0.28931	.95723	.30223	.3087	.0447	.4565	.04276	.71069 0.71041	II
50 51	.28987	0.95715	0.30255	3.3052	1.0448	3.4532 .4498	.04285	.71013	10
52	.29014	.95707	.30287	.2983	.0448	.4465	.04293	.70985	9 8
53	29014	.95690	.30350	.2948	.0449	.4432	.04310	.70958	7
54	.29070	.95681	.30382	.2914	.0451	-4399	.04319	.70930	7 6
55	0.29098	0.95673	0.30414	3.2879	1.0452	3.4366	0.04327	0.70902	5
56	.29126	.95664	.30446	.2845	.0453	+4334	.04335	.70874	5 4
57	.29154	.95656	.30478	.2811	.0454	.4301	.04344	.70846	3
58	.29181	.95647	.30509	.2777	.0455	.4268	.04352	.70818	2
59	.29209	.95639	.30541	.2742	.0456	.4236	.04361	.70791	I
60	0.29237	0.95630	0.30573	3.2708	1.0457	3.4203	0.04369	0.70763	•
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

106°

Natural Trigonometric Functions

17°			Natur	al Trigor	nometric	Function	ıs		162°
M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.2)237	0.95530	0.30573	3.2708	1.0457	3.4203	0.04369	0.70763	60
1	.23265	.95622	.30605	.2674	.0458	.4170	.04378	.70735	59
2	.29293	.95613	.30637	.2540	.0459	.4138	.04386	.70707	58
3	.2)321	.95605	.30668	.2607	.0450	.4106	.04395	.70679	57
5 6	.29348	.95596	.30700	.2573	.0451	.4073	.04404	.70651	56
1 3	0.29376	0.95588 •95579	0.30732 .30764	3.2539	1.0461	3.4041	0.04412	0.70624	55 54
7	.29432	.95571	.30796	.2472	.0463	3977	.04426	.70568	53
7 8	.29460	.95562	.30828		.0464	3945	.04438	.70540	52
9	.29487	95554	.30859		.0465	3913	.04446	.70512	51
10	0.29515	0.95545	0.30891		1.0466	3.3881	0.04455	0.70485	50
11	.29543	.95536	.30923		.0167	.3849	.04463	.70457	49
13	.29571	.95528	.30955	.2305	.0468	.3817	.04472	.70429	48
13	.29598	.95519	.30937	.2271	.0469	.3785	.04481	.70401	47
14	.29626	.95511	.31019	.2238	.0470	-3754	.04489	.70374	46
15	.29682	0.95502	0.31051		1.0471	3.3722	0.04498	0.70346	45
17	.29032	.95493 .95485	.31083	.2172	.0472	.3690	.04507	.70318	44
iś	29737	.95476	.31146	.2106	.0474	.3627	.04524	70262	42
19	.29765	.95467	.31178	.2073	.0475	.3596	.04532	.70235	41
20	0.29793	0.95459	0.31210		1.0476	3.3565	0.04541	0.70207	40
21	.29821	.95450	.31242	.2008	.0477	•3534	.04550	.70179	39
22	.29848	.95441	.31274	.1975	.0478	.3502	.04558	.70151	38
23	.29876	•95433	.31306	.1942	.0478	.3471	.04567	.70124	37
24	.29904	.95424	.31338	.1910	.0479	.3440	.04576	.70096	36
25	0.29932	0.95415	0.31370		1.0480	3.3409	0.04585	0.70068	35
26	.29959	.95407	.31402	.1845	.0491	.3378	.04593	.70040	34
27 28	.29987 .30015	.95398 .95389	.31434 .31466	1813 .1780	.0482	-3347	.04602	.70013	33 32
29	.30043	.95380	.31498	.1748	.0484	.3316	.04619	.69957	31
30	0.30070	0.95372	0.31530	3.1716	1.0485	3.3255	0.04628	0.69929	,30
31	.30098	.95363	.31562	.1684	.0486	.3224	.04637	.69902	29
32	.30126	95354	.31594	.1652	.0487	.3194	.04646	.69874	28
33	.30154	95345	.31626	.1620	.0488	.3163	.04654	.69846	27
34	.30181	.95337	.31658	.1588	.0489	.3133	.04663	.69818	26
35 36	0.30209	0.95328	0.31690	3.1556	1.0490	3.3102	0.04672	0.69791	25
30	.30237	.95319	.31722	.1524	.0491	.3072	.04681	.69763	24
37 38	.30265	.95310	.31754 .31786	.1492 .1460	.0492	.3042	.04690	.69735	23
39	.30292	.9530I .95293	.31780	.1429	.0494	.2981	.04093	.69680	21
40	0.30348	0.95284	0.31850	3.1397	1.0495	3.2951	0.04716	0.69652	20
41	.30375	.95275	.31882	.1366	.0496	.2921	.04725	.69624	19
42	.30403	.95266	.31914	.1334	.0497	.2891	.04734	.69597	18
43	.30431	.95257	.31946	.1303	.0498	.2861	.04743	.69569	17
44	.30459	.95248	.31978	.1271	.0499	.2831	.04751	.69541	16
45 46	0.30486	0.95239	0.32010	3.1240	1.0500	3.2801	0.04760	0.69513	15
40	.30514	.95231	.32042	.1209	.0501	.2772	.04769	.69486	14
47 48	.30542	.95222	.32074	.1177	.0502	.2742	.04778	.69458	13
49		.95213	.32138	.1140	.0503	2583	.04787	.69403	II I
50	.30597 0.30625	0.95195	0.32171	3.1084	1.0505	3.2653	0.04805	0.69375	10
51	.30653	.95186	32203	.1053	.0506	.2624	.04814	.69347	
52	.30680	.95177	.32235	.1022	.0507	.2594	.04823	.69320	8
53	.30708	.95168	.32267	.0991	.0508	.2565	.04832	.69292	7
54 55 56	.30736	.95159	.32299	.0960	.0509	.2535	.04840	.69264	
55	0.30763	0.95150	0.32331	3.0930	1.0510	3.2506	0.04849	0.69237	5
50	.30791	.95141	.32363	.0899	.0511	.2477	.04858	.69209	4
57 58	.30819	.95132	.32395	.0868	.0512	.2448	.04867	.69181 .69154	3 2
50	.30846	.95124	.32426	.0807	.0513	.2419	.04885	.69134	1
59 60	0.30902	0.95106	0.32492	3.0777	1.0515	3.2361	0.04894	0.69098	ò
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
-	0.30902	0.95106	0.32492	3.0777	1.0515	3.2361	0.04894	0 69098	60
i	.30929	.95097	.32524	.0746	.0516	.2332	.04903	.09071	59 58
2	.30957	.95088	.32556	.0716	.0517	.2303	.04912	69043	58
3 4	.30985	.95079	.32588	.0686	.0518	.2274	.04921	69015	57 56
4	.31012	.95070	.32621	.0655	.0519	.2245	.04930	.68988 o.6896o	50
5	0.31040	0.95061	0.32653	3.0625	1.0520	3.2216	0.04939	.68932	55 54
7	.31063	.95051	.32003	.0565	.0522	.2150	.04943	.68905	53
7 8	.31123	.95033	.32749	.0535	.0523	.2131	.04966	.68877	52
9	.31150	.95024	.32782	.0505	.0524	.2102	.04975	.68349	51
IO	0.31178	0.95015	0.32814	3.0475	1.0525	3.2074	0.04985	0.68822	50
11	.31206	.95∞6	.32846	.0445	.0526	.2045	.04994	.68794	49
12	.31233	-94997	.32878	.0415	.0527	.2017	.05003	.68766	48
13	.31261 .31289	.94988	.32910	.0335 .0356	.0528	.1939	.05012	.68739	47 46
15	0.31316	.94979 0.94970	0.32975	3.0326	1.0530	3.1932	0,05030	0.68684	45
15	.31344	.94961	.33007	.0296	.0531	.1904	.05039	.68656	44
17	.31372	.94952	.33039	.0257	.0532	.1376	.05048	.68628	43
18	.31399	.94942	.33072	.0237	.0533	.1348	.05057	.68601	42
19	.31427	.94933	.33104	.0208	.0534	.1820	.05066	.68573	41
20	0.31454	0.94924	0.33135	3.0178	1.0535	3.1792	0.05076	0.68545	40
21 22	.31482	.94915	.33169	.0149	.0536	.1764 .1736	.05085	.68518 .68490	39 38
23	.31510	.94906	.33201	.0120	.0537	.1708	.05094	.68463	37
24	.31565	.94883	33265	.0061	.0539	1631	.05112	.68435	36
25	0.31592	0.94378	0.33298	3,0032	1.0540	3.1653	0.05121	0.68407	35
25 26	.31620	.94869	.33330	.∞3	.0341	.1625	.05131	.68380	34
27	.31648	.94360	.33362	2.9974	.0542	.1598	.05140	.68352	33
28	.31675	.94351	•33395	.9945	.0543	.1570	.05149	.68325	32
30	.31703	.94341 0.94832	-33427	.9916 2.9337	.0544	.1543	.05158	.68297 0.68269	31 30
31	0.31730	.94823	0.33459	.9358	.0545	3.1515 .1438	0.05168	.63212	30
32	31786	.94314	.33524	.9329	.0547	.1461	.05186	.63214	29 23
33	.31913	.94305	-33557	.9300	.0548	.1433	.05195	.68187	27
34	.31841	-94795	-33589	.9772	.0549	.1406	.05205	.68159	26
35 36	0.31868	0.94736	0.33621	2.9743	1.0550	3.1379	0.05214	0.68132	25
35	.31896	.94777	.33654	.9714	.0551	.1352	.05223	.68104	24
37 38	.31923	.94767	.33686	.9636	.0552	.1325	.05232	.68076	23 22
39	.31951	.94758	.33718	.9657 .9629	.0553	.1298	.05242	.68049 .68021	21
40	0.32006	0.94740	0.33783	2.9500	1.0555	3.1244	0.05260	0.67994	20
41	.32034	.94730	.33316	.9572	.0556	.1217	.05270	.67966	19
42	.32061	.94721	.33943	.9344	.0557	.1190	.05279	.67939	18
43	.32089	.94712	.33880	.9515	.0558	.1163	.05288	.67911	17
44	.32116	.94702	.33913	.9487	.0559	.1137	.05297	.67884	16
45 46	0.32144	0.94693	0.33945	2.9459	1.0560	3.1110	0.05307	0.67856	15
40	.32171	.94684 .94674	.33978	.9431	.0561	.1033	.05316	.67828 .67801	14 13
47 48	.32199	.94665	.34043	.9375	.0563	.1037	.05320	.67773	13
49	,32254	.94655	.34075	.93/3	.0565	.1004	.05344	.67746	11
50	0.32282	0.94646	0.34108	2.9319	1.0566	3.0977	0.05354	0.67718	10
51	.32309	.94637	.34140	.9291	.0367	.0951	.05363	.67691	9
52	.32337	.94627	.34173	.9263	.0568	.0925	.05373	.67663	8
53	.32364	.94613	.34205	.9235	.0569	.0398	.05382	.67636	7 6 5 4
54	.32392 0.32419	.94608 0.94599	.34238 0.34270	.9208	1.0570	3.0846	0.05391	.67608 0.67531	۲
55 56	.32447	.94590	.34303	.9152	.0572	.0820	.05410	.67353	3
57	.32474	.94580	34335	.9132	.0573	.0793	.05420	.67526	3 1
58	.32502	.94571	.34368	.9097	.0574	.0767	.05429	.67493	3 2
59	.32529	.94561	.344∞	.9069	.0575	.0741	.05439	.67471	I
60	0.32557	0.94552	0.34433	2.9042	1.0576	3.0715	0.05448	0.67443	٥
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

Natural Trigonometric Functions

160°

19°			Natura	l Trigon	ometric 1	Function	3		160
M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
0	0.32557	0.94552	0.34433	2.9042	1.0576	3.0715	0.05448	0.67443	60
1	.32584	.94542	.34465	.9015	.0577	.0690	.05458	.67416	59 58
2	.32612	.94533	.34498	.8937	.0578	.0664	.05467	.67388	58
3 4	.32639	.94523	.34530	.896o .8933	.0579	.0638	.05476	.67361 .67333	57 56
5	0.32694	0.94504	0.34595	2.8905	1.0531	3.0586	0.05495	0.67306	55
5	.32722	94495	.34628	.8878	.0582	.0561	.05505	.67278	54
7 8	.32749	.94485	.34661	.8851	.0584	.0535	.05515	.67251	53
	.32777	.94476	.34693	.8824	.0585	.0509	.05524	.67223	52
9	.32804 0.32832	.94466	.34726 0.34758	.8797 2.8770	1.0586	.0484 3.0458	.05534	.67196 0.67168	51 50
11	.32859	.94447	.34791	.8743	.0588	.0433	0.05543	.67141	40
12	.32887	.94438	.34824	.8716	.0589	.0407	.05562	.67113	49 48
13	.32914	.94428	.34856	.8689	.0590	.0382	.05572	.67086	47
14	.32942	.94418	. 34889	.8662	.0591	.0357	.05581	.67058	46
15 16	0.32969	0.94409	0.34921	2.8636	1.0592	3.0331	0.05591	0.67031	45
17	.32996	.94399 .94390	.34954	.8609 .8582	.0593	.0306	.05601	.67003 .66976	44 43
18	.33024	.94390	.35019	.8555	.0595	.0256	.05620	.66948	43
19	.33079	.94370	.35052	.8529	.0595	.0231	.05629	.66921	41
20	0.33106	0.94361	0.35085	2.8502	1.0598	3.0206	0.05639	0.66894	40
21	-33134	.94351	.35117	.8476	.0599	.0181	.05649	.66866	39 38
22	.33161	.94341	.35150	.8449	.0600	.0156	.05658	.66839	38
23 24	.33189	.94332	.35183	.8423 .8396	.0601	.0131	.05668	.66811	37 36
25	0.33243	0.94313	0.35248	2.8370	1.0603	3.0081	0.05687	0.66756	35
25 26	.33271	.94303	.35281	.8344	.0604	.0056	.05697	.66729	34
27	.33298	.94293	.35314	.8318	.0605	.0031	.05707	.66701	33
28	. 33326	.94283	.35346	.8291	.0606	.0007	.05716	.66674	32
29	-33353	.94274	-35379	.8265	.0607	2.9982	.05726	.66647	31
30 31	0.33381	0.94264	0.35412	2.8239	1.0608	2.9957	0.05736	0.66619	30 29
32	.33408	.94254	.35445 .35477	.8187	.0611	.9933 .9908	.05745	.66564	28
33	.33463	.94235	.35510	.8161	.0612	.9834	.05765	.66537	
34	.33490	.94225	-35543	.8135	.0613	.9859	.05775	.66510	27 26
35	0.33538	0.94215	0.35576	2.8109	1.0614	2.9935	0.05784	0.66482	25
36	- 33545	.94206	.35608	.8083	.0615	.9810	.05794	.66455	24
37 38	.33572	.94196 .94186	.35641	.8057 .8032	.0616	.9786 .9762	.05804	.66427	23 22
39	.33627	.94176	.35707	.8006	.0618	.9738	.05823	.66373	21
40	0.33655	0.94167	0.35739	2.7980	1.0619	2.9713	0.05833	0.66345	20
41	. 33682	.94157	.35772	-7954	.0620	.9689	.05843	.66318	19
42	.33709	.94147	.35805	.7929	.0622	.9665	.05853	.66290	18
43	33737	.94137	.35838	.7903	.0623	.9641	.05863	.66263 .66236	17 16
44 45	.33764 0.33792	.94127 0.94118	0.35904	2.7852	1.0625	2.9593	0.05872	0.66208	15
46	.33819	.94108	.35936	.7827	.0626	.9569	.05892	.66181	14
47	.33846	.94098	.35969	.7801	.0627	.9545	.05902	.66153	13
48	.33874	.94088	.36002	.7776	.0628	.9521	.05912	.66126	12
49	.33901	.94078	.36035	.7751	.0629	.9497	.05922	.66009	11
50 51	0.33928	0.94058	0.36068	2.7725	1.0630	2.9474	0.05932	0.66071 .66044	10
52	.33983	.94050	.36134	.7675	.0632	.9426	.05951	.66017	9 8
53	.34011	.94039	.36167	.7650	.0634	.9402	.05961	.65989	7
54	. 34038	.94029	.36199	.7625	.0635	.9379	.05971	.65962	6
55	0.34065	0.94019	0.36232	2.7600	1.0636	2.9355	0.05981	0.65935	5
56	.34093	.94009	.36265	-7575	.0637	.9332	.05991	.65907	4
57 58	.34120	.93999	.36298 .36331	.7550 .7525	. o638 . o639	.9308	.06001	.65853	3 2
59	.34175	.93939	.36364	.7500	.0039	.9261	.06021	.65825	ī
59 60	0.34202	0.93969	0.36397	2.7475	1.0642	2.9238	0.06031	0.65798	0
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

109°

20°			Natura	d Trigor	ometric	Function	s		159°
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin	Vrs. Cos.	М
0	0.34202	0.93969	0.36397	2.7475	1.0642	2.9238	0.06031	0.65798	60
I	.34229	•93959	.36430	.7450	.0643	.9215	.06041	.65771	59
2	.34257	•93949	.36463	.7425	.0644	.9191	.06051	.65743	58
3 4	.34284	.93939 .93929	.36529	.7400	.0645	.9145	.06071	.65716	57 56
5	0.34339	0.93919	0.36562		1.0647	2.9122	0.06080	0.65661	55
5	.34366	.93909	.36595	.7326	.0648	.9098	.06090	.65634	54
8	.34393	.93899	.36628	.7302	.0650	.9075	.06100	.65607	53
	.34421	.93889	.36661	.7277	.0651	.9052	.06110	.65579	52
10	0.34448	.93879 o.93869	.36694	2.7252	.0652 1.0653	2.9006	0.06121	.65552 0.65525	51 50
111	.34502	.93859	.36760	.7204	.0654	.8983	.06141	.65497	49
12	.34530	.93849	.36793	.7179	.0655	.8960	.06151	.65470	48
13	-34557	.93839	.36826	.7155	.0656	.8937	.06161	.65443	47
14	.34584	.93829	.36859	.7130	.0658	.8915	.06171	.65415	46
15	0.34612	0.93819	0.36892		1.0659	2.8392	0.06181	0.65388	45
16	.34639	.93809	.36925	.7082	.0660	.8869	.06191	.65361	44
17 18	.34666	.93799 .93789	.36958 .36991	.7058	.0661	.8846	.06201	.65334	43 42
19	.34721	.93779	.37024	.7009	.0663	.8801	.06221	.65279	41
20	0.34748	0.93769	0.37057	2.6985	1.0664	2.8778	0.06231	0.65252	40
21	.34775	.93758	.37090	.6961	.0666	.8756	.06241	.65225	39
22	.34803	.93748	.37123	.6937	.0667	.8733	.06251	.65197	38
23	.34830	.93738	.37156	.6913	.0663	.8711	.06262	.65170	37
24	.34857	.93728	.37190	.6889	.0669	.8638	.06272	.65143	36
25 26	0.34884	0.93718 .93708	0.37223	2.6865	1.0670	2.8666	0.06282	0.65115	35 34
27	.34939	.93698	37289	.6817	.0673	.8621	.06302	.65061	33
28	.34966	.93687	.37322	.6794	.0674	.8599	.06312	.65034	32
29	.34993	.93677	37355	.6770	.0675	.8577	.06323	.65006	31
30	0.35021	0.93667	0.37388	2.6746	1.0676	2.8554	0.06333	0.64979	30
31	.35048	.93657	.37422	.6722	.0677	.8532	.06343	.64952	29
32	.35075	.93647	-37455	.6699	.0678	.8510	.06353	.64925	28
33	.35102	.93637 .93626	.37488	.6675 .6652	.0679	.8466	.06363	.64897 .64870	27 26
34 35	0.35157	0.93616	0.37554	2,6628	1.0682	2.8444	0.06384	0.64843	25
36	.35184	.93606	.37587	.6604	.0683	.8422	.06394	.64816	24
37	.35211	.93596	.37621	.6581	.0684	.8400	.06404	.64789	23
38	.35239	.93585	.37654	.6558	.0685	.8378	.06414	.64761	22
39	.35266	.93575	.37687	.6534	.0686	.8356	.06425	.64734	21
40	0.35293	0.93565	0.37720	2.6511	1.0688	2.8334	0.06435	0.64707	20
4I 42	.35320	•93555 •93544	.37754	.6487 .6464	.0689	.8312	.06445	.64680 .64652	19
43	·35347	93534	.37820	.6441	.0691	.8269	06466	.64625	17
44	.35402	.93524	.37853	.6418	.0692	.8247	.06476	.64598	16
45	0.35429	0.93513	0.37887	2.6394	1.0694	2.8225	0.06486	0.64571	15
46	.35456	.93503	.37920	.6371	.0695	.8204	.06497	.64544	14
47 48	.35483	-93493	-37953	.6348	.0696	.8182	.06507	.64516	13
	.35511	.93482	.37986	.6325	.0697	.8160 .8139	.06517	.64489	12 11
49 50	0.35538	0.93462	0.38053	2.6279	1.0699	2.8117	0.06538	0.64435	IO
51	•35592	.93451	.38086	.6256	.0701	.8096	.06548	.64408	
52	.35619	.93441	.38120	.6233	.0702	.8074	.06559	.64380	9
53	35647	.93431	.38153	.6210	.0703	.8053	.06569	.64353	7
54	.35674	.93420	.38186	.6187	.0704	.8032	.06579	.64326	9
55 56	0.35701	.93410	.38220	2.6164 .6142	.0705	2.8010 .7989	0.06590 .06600	0.64299	5
57	.35728 .35755	.93389	.38286	.6119	.0708	.7968	.06611	.64245	3
57 58	.35782	.93379	.38320	.6096	.0709	.7947	.06621	.64217	2
59	.35782	.93363	.38353	.6073	.0710	.7925	.06631	.64190	1
60	0.35837	0.93358	0.38386	2.6051	1.0711	2.7904	0.06642	0.64163	•
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

110° 69°

21° Natural Trigonometric Functions

158°

28 36596 -93653 .39324 .5430 .0745 .7325 .06937 .63404 29 .36623 .93952 .93957 .5430 .0714 .7305 .06947 .63377 30 0.36620 0.93042 0.33391 2.5356 1.0748 2.7285 .06958 0.63323 31 .36677 .93031 .39425 .3365 .0799 .05266 33 .36731 .93010 .39492 .5322 .0751 .7225 .06999 .63269 34 .36758 .92993 .39525 .5300 .0751 .7225 .07001 .07012 .63242 35 0.36785 0.92938 0.33509 .5257 .0755 .7165 .07022 .63187 37 .36339 .92967 .39606 .5236 .0736 .7145 .07022 .63187 37 .36399 .9295 .39650 .5214 .0753 .7125 .07044 .63135 <tr< th=""><th></th><th></th><th></th><th>Matura</th><th>1 TIIGOTI</th><th>omenic i</th><th>dictions</th><th>•</th><th></th><th>100</th></tr<>				Matura	1 TIIGOTI	omenic i	dictions	•		100
1	М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
1 .35364 .93344 .33420 .60623 .0713 .7833 .66652 .64136 .64052 .64053 .35913 .93327 .38186 .5993 .0715 .7841 .06673 .64052 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .64052 .64053 .66063 .64052 .64052 .64053 .64052 .64053 .64052 .64053 .66063 .64052 .64053 .66063 .64052 .64053 .66063 .64052 .64053 .66063 .64052 .64053 .66063 .64052 .64053 .66063 .64052 .64053 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .64052 .66063 .66063 .64052 .66063 .64052 .66063 .66063 .66062 .66062 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .660627 .66063 .660627 .66063 .660627 .66063 .660627 .660627 .66063 .660627 .6606		0.35837	0.03353	0.38386	2.6051	I.0711	2.7001	0.06642	0.64163	60
2 .33391 .93337 .33453 .6006 .0714 .7962 .6663 .64052 .6563 .9337 .33486 .5933 .0715 .7841 .66673 .64052 .66634 .64055 .63397 .93306 .38537 .5960 .0716 .7820 .66634 .64055 .6563 .64055 .6563 .64052 .66634 .64055 .6563 .64052 .66634 .64055 .64006 .93395 .38587 .5916 .0719 .7778 .6400 .6507 .64000 .93295 .38587 .5916 .0719 .7778 .6400 .64000 .64000 .83000 .93295 .38587 .5916 .0719 .7778 .6400 .64000 .64000 .83000 .93274 .38654 .5871 .0721 .7775 .66726 .63946 .93064 .93264 .93274 .38654 .5871 .0721 .7775 .66726 .63946 .93608 .93233 .93870 .2.5326 1.0723 .77634 .66737 .63865 .93233 .38784 .5804 .0722 .77715 .66726 .63946 .93616 .93223 .38784 .5804 .0722 .77715 .66726 .63946 .93616 .93223 .38787 .5781 .0726 .70734 .66737 .63865 .93231 .336189 .93222 .33821 .5759 .0727 .7633 .66768 .63397 .1385247 .9311 .33854 .5737 .0728 .7071 .06778 .63865 .138217 .9311 .38554 .5737 .0728 .7071 .06778 .63865 .159 .93221 .9333 .25931 .5093 .0731 .7750 .6610 .63729 .63778 .1836244 .93201 .33955 .5671 .0732 .7550 .66326 .63722 .93153 .39022 .5607 .0734 .7550 .66320 .63722 .93632 .93153 .39022 .5607 .0734 .7550 .66341 .63648 .22 .93632 .93153 .39022 .5607 .0734 .7550 .66341 .63648 .22 .36460 .9317 .39089 .5583 .0737 .7468 .6363 .63593 .22 .36460 .93176 .39156 .39159 .5539 .0733 .7744 .66834 .63632 .22 .36460 .93176 .39159 .5537 .0742 .7447 .66884 .63339 .22 .56569 .93063 .39324 .5536 .0737 .7468 .66936 .63937 .3016 .39156 .99156 .3		.35364								59
3 33913 93327 38186 5983 0.715 7841 0.66673 6.4655		.35391					7862	.06663		58
4 .33945 .93316 .93850 .38523 .5960 .0716 .7820 .66634 .64055 6 .35020 .93295 .38587 .5916 .0719 .7778 .64020 .6576 .64020 .93295 .38587 .5916 .0719 .7778 .64020 .6576 .64020 .5803 .0720 .7778 .06736 .64020 .5803 .0720 .7778 .06736 .63973 .0581 .93264 .93274 .38654 .5871 .0721 .7775 .66726 .63946 .93264 .93274 .38654 .5871 .0721 .7775 .66726 .63946 .93263 .93263 .38720 .25326 1.0723 .7775 .66726 .63946 .93263 .93263 .93272 .25326 1.0723 .7775 .66726 .63946 .93263 .93263 .93223 .38754 .5781 .0722 .77754 .66737 .63865 .93271 .93122 .36162 .93223 .38787 .5781 .0726 .7763 .66736 .63373 .13 .36189 .93222 .38821 .5799 .0727 .77633 .66768 .63367 .13 .36189 .93222 .38821 .5799 .0727 .77633 .66768 .63371 .13 .36214 .93201 .38354 .5737 .0728 .7071 .06778 .63865 .16 .36271 .93309 .38921 .5693 .0731 .7750 .6610 .63729 .177 .36298 .93189 .38955 .5671 .0732 .77590 .06799 .63778 .18 .36325 .93169 .33935 .5649 .0733 .7750 .6630 .63372 .93632 .93153 .39022 .5607 .0734 .7559 .66320 .63722 .93632 .93153 .39022 .5607 .0734 .7559 .66341 .63648 .22 .36460 .93137 .30589 .25655 .10736 .7447 .66383 .63593 .22 .36460 .93116 .39156 .39156 .39156 .39156 .39159 .53179 .0740 .7447 .66384 .63638 .22 .36460 .93116 .39156 .39159 .53179 .0740 .7447 .66884 .63339 .22 .36460 .93116 .39156 .39159 .53179 .0740 .7447 .66884 .63339 .22 .36460 .93116 .39156 .39159 .5317 .0740 .7447 .66884 .63339 .22 .36460 .9316 .39156 .39159 .5317 .0740 .7447 .66884 .63339 .22 .36450 .93169 .39159 .5317 .0740 .7447 .66884 .63339 .22 .36450 .93169 .39159 .5317 .0740 .7447 .66884 .63339 .39159 .39159 .5317 .0740 .7447 .66884 .63339 .39159 .39159 .5317 .0740 .7447 .66884 .63339 .39159 .39159 .5317 .0740 .7447 .60884 .63339 .39159 .39159 .5317 .0740 .7447 .60884 .63339 .39159 .39159 .5317 .0740 .7447 .60884 .63339 .3916 .39156 .39159 .5317 .0740 .7447 .60884 .63339 .39159 .39159 .5517 .0742 .7785 .06959 .63418 .300373 .39159 .5317 .0740 .7447 .7468 .66959 .63418 .300373 .39159 .5317 .0740 .7447 .7366 .06997 .63418 .300373 .39159 .5318 .0747 .7935 .06991 .63418 .300373 .3	3			.38486	. 5983		.7841			57
5 0.33972 0.93365 0.38553 2.9938 1.0717 2.7799 0.06694 0.64000 7 .36000 .93295 .38867 .5916 0.719 .7773 0.6705 6.6304 8 .36054 .93274 .38654 .5871 0.721 .7715 0.6726 .63946 9 .36081 .93253 .38720 2.5826 1.0723 2.7694 0.06747 .63865 11 .36125 .93243 .38754 .5848 .0722 .7715 .06737 .63865 12 .36162 .93232 .38787 .5781 .0726 .7653 .06788 .6337 14 .36127 .93190 .389321 .5599 .0727 .7632 .06778 .63810 15 .36241 .93190 .38938 .35555 .5671 .0732 .7591 .06310 .6372 16 .36271 .93190 .33938 .35555 .5671 .0733 .7529				.38520	.5960		.7820			57 56
7 .36021 .93285 .38620 .5893 .0720 .7757 .06726 .63946 9 .36081 .93264 .38681 .8848 .0722 .7715 .06726 .63946 10 .36108 .93253 .38720 2.8536 1.0723 2.7694 0.06747 0.3802 11 .36135 .93243 .38754 .884 .0725 .7674 0.0777 .03805 12 .36169 .93222 .3821 .5759 .0727 .7632 0.6778 .63810 14 .36271 .93190 .38921 .5599 .0727 .7502 .06798 .63731 16 .36271 .93190 .38935 .5557 .0731 .7570 .06310 .63729 17 .36298 .93180 .38955 .5671 .0732 .7550 .06320 .63722 18 .36325 .93153 .39022 .5627 .0734 .7569 .06331 .63672	5	0.35972		0.38553	2.5938			0.06694		55
9 . 36081 . 93264 .38687 .5848 .0722 .7715 .06726 .63919 10 0.36108 0.9253 0.38720 2.5856 1.0723 2.7694 0.06747 0.63862 11	6	.36∞∞			.5916		.7778		.64000	54
9 . 36081 . 93264 .38687 .5848 .0722 .7715 .06726 .63919 10 0.36108 0.9253 0.38720 2.5856 1.0723 2.7694 0.06747 0.63862 11	7	.36027						.06715		53
To 0.36108 0.93253 0.38720 2.5826 1.0723 2.7694 0.66757 0.63865 12 36162 9.9324 3.8754 5.584 0.725 7.7674 0.66757 0.63865 12 3.6162 9.9322 3.8821 5.759 0.727 7.612 0.6778 6.3810 0.6781 0.6		.36054		.38654	.5871					52
TI					.5848		.7715	.06736		51
12				0.38720						50
13 36189 93222 338821 5759 0.0727 7.652 0.66778 6.63610 6.3783 15 0.36241 0.93201 0.38538 2.5715 1.0729 2.7591 0.06799 0.63785 16 36271 9.3190 3.8931 5.693 0.731 7.570 0.66310 6.53783 17 36298 9.3180 3.8955 5.671 0.732 7.7550 0.66320 6.3762 18 3.6525 9.3169 3.8933 5.649 0.733 7.529 0.66321 6.3672 2.63631 6.3672 2.63631 6.3672 2.63631 6.3672 2.63631 6.3673 2.627 0.733 7.529 0.66311 6.3674 2.6363 2.627 0.734 7.7599 0.66311 6.3674 2.6363 2.6363 0.36372 2.6363 0.36372 2.6363 0.36373 0.33053 2.5605 0.733 7.7468 0.66832 0.63631 6.3673 2.23633 0.36360 9.3137 3.3089 5.583 0.733 7.447 0.6873 6.6363 6.3593 2.23 3.6460 9.3116 3.9156 5.5399 0.739 7.427 0.6884 6.3539 2.24 3.6463 9.3106 3.9158 5.5399 0.739 7.427 0.6884 6.3532 2.63631 0.3656 0.3642 9.3063 0.3923 2.5495 1.0742 2.7386 0.66956 0.6345 2.27 3.6569 9.3074 3.39290 5.451 0.744 7.346 0.6696 6.6345 2.27 3.6569 9.3074 3.39290 5.451 0.744 7.7346 0.6696 6.6345 2.28 3.6567 9.3031 2.3363 0.747 7.305 0.6947 6.3377 3.0 0.36650 9.3042 3.3945 5.3539 0.747 7.305 0.6947 6.3373 3.2 3.36731 9.3010 3.9425 5.356 0.747 7.305 0.6947 6.3373 3.2 3.36731 9.3010 3.9425 5.356 0.747 7.265 0.6959 0.6333 3.3633 9.2956 3.3653 9.2993 3.3953 5.530 0.753 7.725 0.6997 0.3266 3.333 3.6363 9.2956 3.3660 3.214 0.733 7.745 0.7002 0.6343 3.36731 9.2903 3.3955 5.350 0.753 7.725 0.6997 0.3236 3.36382 9.2993 3.3953 5.535 0.774 7.735 0.6997 0.3236 3.36382 9.2993 3.3953 5.535 0.774 7.735 0.6997 0.3236 0.6333 3.6368 9.2995 3.3966 5.214 0.753 7.725 0.6997 0.6341 0.3698 0.2935 0.39986 5.236 0.765 0.7003 0.6343 0.6337 0.7003 0.6343 0.6363 0.7003 0.634							.7074			49
14 36217 93.11 38854 5737 0.728 7611 0.6789 0.63783 15 0.36244 0.93201 0.38588 2.5715 1.0729 2.7591 0.06799 0.63786 16 36271 93190 38921 5693 0.731 7.570 0.66310 0.63729 17 36298 93150 38953 5.671 0.732 7.550 0.66320 0.63729 19 36352 93153 339022 5.627 0.734 7.559 0.66311 0.6365 0.63621 0.36379 0.91148 0.39055 2.5605 1.0736 2.7488 0.6853 0.63621 0.36379 0.91148 0.39055 2.5605 1.0736 2.7488 0.6853 0.63621 0.6321 0.6321 0.6333 0.39127 3.9039 5.583 0.737 7.468 0.6853 0.63621 0.6321 0.6331 0.9316 3.9156 5.539 0.739 7.447 0.6834 0.6335 0.6352 2.3 36460 9316 3.9156 5.539 0.739 7.447 0.6834 0.6335 0.6352 2.5 0.36515 0.9305 0.3923 2.517 0.740 7.406 0.6594 0.6334 0.6332 0.6322 2.5 0.36515 0.9305 0.3923 2.517 0.740 7.406 0.6594 0.6334 0.6332 0.6342 0.6362 0.				.38787						48
15								.00778		47
16		.30217		30054				00789		46
17	16							0.00799		45
18										44 43
19				29038					62625	43
20 0.36379 0.91448 0.39055 2.5605 1.0736 2.7488 0.66853 0.63593		36352		30022	5627	0734	7500	06841	63648	41
21		0.36370			2.5605		2.7488	0.00342		40
22 36433 93127 39122 55561 0.738 7.447 0.6873 63356 23 36460 93116 39156 5339 0.739 7.427 0.6873 63356 24 36438 93105 39139 5517 0.740 7.406 0.6894 63312 25 0.36515 0.93025 0.39223 2.5495 1.0742 2.7386 0.66905 0.6348 26 36542 93084 39257 5.473 0.744 7.346 0.66916 0.6345 27 36569 93074 339290 5.451 0.744 7.346 0.6926 0.5435 28 36596 93063 39334 5.543 0.745 7.7325 0.6937 0.6404 29 3.36523 9.9362 3.9337 5.408 0.747 7.7305 0.6936 0.6337 30 0.36650 0.93042 0.30301 2.5336 1.0748 2.7385 0.6958 0.63337 31 3.6677 93031 3.9425 5.365 0.749 7.265 0.6969 0.63333 32 36704 93300 3.9445 5.343 0.750 7.7445 0.6979 0.6326 33 36731 93101 3.9442 5.322 0.751 7.725 0.69907 0.6326 34 3.6738 9.2993 3.95359 2.578 1.0754 2.7185 0.07012 0.63214 35 0.36785 0.92933 0.39539 2.5278 1.0754 2.7185 0.07012 0.63214 36 3.6832 9.9267 3.3660 5.214 0.753 7.7165 0.07012 0.63214 37 3.6839 9.9267 3.3966 5.236 0.756 7.745 0.0701 0.63214 30 3.6933 9.9245 3.3960 5.214 0.753 7.7155 0.0702 0.6316 33 3.6866 9.9256 3.3966 5.214 0.753 7.7155 0.0702 0.6316 34 3.6948 9.9243 3.3977 2.5171 1.0760 2.7085 0.07054 0.3106 41 3.6948 9.9293 3.39586 5.5108 0.076 7.065 0.07076 6.3052 42 3.6975 9.9293 0.39858 5.508 0.076 7.065 0.07076 6.3052 43 3.7002 9.9295 3.3966 5.214 0.0753 7.715 0.07076 6.3052 44 3.7029 0.9281 3.3976 5.5150 0.076 7.065 0.07076 6.3052 45 0.37036 0.9281 0.39866 5.5171 1.0760 2.7085 0.07054 0.3106 46 3.7033 9.2876 3.3986 2.5065 1.0766 2.6986 0.07119 0.62944 47 3.7110 9.8287 0.3986 5.508 0.076 7.006 0.07076 6.3052 48 3.7137 9.2838 0.3938							7468	06863		30
23 36460 93176 339156 55339 0.739 7.427 0.6684 635312 25 0.36438 9.9105 3.039 5517 0.7042 2.7386 0.66905 0.63485 26 3.36545 9.3095 0.39223 2.5495 1.0742 2.7386 0.66905 0.63485 27 3.0569 9.3074 3.9290 5.451 0.744 7.346 0.6926 0.5431 28 3.5996 9.3074 3.9290 5.451 0.744 7.346 0.6926 0.5431 28 3.5996 9.3053 3.9334 5.430 0.745 7.325 0.6937 0.5404 29 3.05623 9.3052 9.3357 5.468 0.747 7.7305 0.6947 0.6337 30 0.36650 0.93042 0.33391 2.5336 1.0748 2.7285 0.6958 0.6337 31 3.05677 9.3031 3.9425 5.365 0.749 7.265 0.6969 0.3323 32 3.36731 9.3010 3.9492 5.322 0.751 7.725 0.6990 0.5266 33 3.05731 9.3010 3.9492 5.322 0.751 7.725 0.6990 0.5266 33 3.6573 0.92933 0.39559 2.578 1.0754 2.7135 0.07012 0.6241 35 0.36735 0.92933 0.3959 2.578 1.0754 2.7135 0.07012 0.6241 36 3.6812 0.9297 3.30626 5.236 0.736 7.145 0.07022 0.6187 37 3.6839 0.9295 3.3960 5.214 0.753 7.125 0.0702 0.6187 38 3.6966 9.9295 0.39660 5.214 0.753 7.125 0.0704 0.6187 41 3.6948 0.9241 3.9791 5.150 0.0761 7.065 0.0704 0.3041 42 3.6975 0.92933 0.30777 2.5171 1.0760 2.7085 0.07065 0.63079 43 3.7002 9.9292 3.9382 5.508 0.0765 7.055 0.07076 0.6302 44 3.7029 9.8297 3.9396 2.5055 1.0766 0.07076 0.6294 45 0.37036 0.92831 0.3993 5.525 0.0705 0.07076 0.0008 45 0.37036 0.92831 0.3906 0.3065 0.0706 0.07076 0.0008 46 3.7137 9.9282 0.39862 5.5086 0.0765 7.006 0.07076 0.0008 47 3.7110 9.2859 3.9906 5.5085 0.0765 7.006 0.07076 0.0008 48 3.7137 9.2813 3.0908 5.5086 0.0765 7.006 0.0719 0.62944 46 3.7303 0.9287 0.3996 0.3996 0.07071 0.6286 59 3.7144 9.2729 0.40065 2.4960					.5561	.0738		.06873	63566	39 38
24 36438 9.3105 3.39139 5.5317 0.710 7.406 0.66904 0.63148 25 0.36515 0.93095 0.33223 2.5495 1.0742 2.7386 0.66905 0.63485 26 3.6542 93084 3.9257 5.473 0.743 7.366 0.69906 0.63485 27 3.9569 9.3074 3.9290 5.451 0.744 7.346 0.6926 0.63485 28 3.9596 9.3074 3.9393 0.747 7.305 0.6907 0.63404 29 3.9652 9.3052 3.9357 5.408 0.747 7.735 0.6907 0.63404 29 3.9652 9.3042 3.3331 2.5336 1.0744 2.7285 0.69037 0.63350 31 3.6677 9.3031 3.9425 5.326 0.749 7.265 0.69059 0.63350 32 3.9704 9.3020 3.9458 5.5343 0.0745 0.725 0.69079 0.63260 33 3.6731 9.3010 3.9492 5.322 0.751 7.225 0.6999 0.63260 34 3.6735 9.2997 3.9525 5.300 0.753 7.725 0.07012 0.63241 36 3.6931 9.9293 3.99599 2.5278 1.0754 2.7185 0.07012 0.63241 36 3.6931 9.9295 3.9056 5.236 0.0753 7.725 0.07012 0.63241 37 3.6839 9.9296 3.3960 5.214 0.0753 7.725 0.07014 0.63241 39 3.6893 9.9245 3.39694 5.5193 0.759 7.7165 0.07022 0.63160 38 3.6866 9.9256 3.3960 5.214 0.0753 7.725 0.0704 0.63160 39 3.6893 9.9245 3.39777 2.5171 1.0760 2.7085 0.07065 0.63079 41 3.6948 9.9243 3.39751 5.5150 0.0761 7.0765 0.07076 0.63074 42 3.6975 9.2903 3.99358 5.508 0.0765 0.07076 0.63074 43 3.7020 9.2902 3.99838 5.108 0.0764 0.07076 0.63074 44 3.37020 9.2902 3.99838 5.108 0.0766 0.07076 0.63074 45 0.37056 0.92351 0.3996 5.5056 0.0766 0.07076 0.63074 47 3.7110 9.2859 3.9903 5.5022 0.0766 0.07076 0.63074 48 3.7137 9.2838 3.9997 5.5022 0.0766 0.07076 0.63074 48 3.7137 9.2838 3.9997 5.5020 0.0707 0.0717 0.0227 0.6294 49 3.7164 0.92879 0.40065 2.4960 0.07077 0.6389 0.07119 0.62944 50 0.37141 0.92879 0					.5530			.06884		37
25 0.36515 0.39305 0.39233 2.5495 1.0742 2.7366 0.66905 0.65485										36
26		0.36515								35
28	26	.36542			.5473		.7366		.63458	34
28	27									34 33
29	28									32
30	29	.36623	.93052	-39357	.5408		.7305	.06947	.63377	31
33 36731 .93010 .39492 .5322 .0751 .7225 .06990 .63269 34 .36758 .92992 .39525 .5320 .0751 .7225 .07001 .063214 35 0.36735 0.92938 0.39599 .25278 1.0754 2.7185 0.07012 0.63214 37 .36339 .92967 .39566 .5236 .0756 .7145 .07022 .03186 38 .36896 .92956 .39660 .5214 .0753 .7125 .07044 .63136 40 0.36921 0.92935 0.30727 2.5171 1.0760 2.7085 0.07065 0.63079 41 .36948 9.9244 .39751 .5150 .0761 .7065 .07076 6.63052 42 .36975 .92913 .39795 .5129 .0763 .7045 .07065 0.63072 43 .37002 .92902 .39328 .5108 .0764 .7066 .07097			0.93042	0.39391	2.5386	1.0748	2.7285	0.06958	0.63350	30
33 .36731 .93010 .39492 .5322 .0751 .7225 .06990 .63269 34 .36758 .92992 .93525 .5300 .0753 .7205 .07001 .063214 35 0.36735 0.92938 .39593 .2527 .0755 .7165 .07022 .03134 37 .36839 .92967 .39966 .5236 .0756 .7145 .07032 .03166 38 .36893 .92945 .39960 .5214 .0753 .7125 .07044 .63136 40 0.36921 0.92935 0.30727 2.5171 1.0760 2.7085 0.07065 0.63079 41 .36948 9.924 .39751 .5150 .0761 .7065 .07076 6.3052 42 .36975 .92913 .39795 .5129 .0763 .7045 .07067 6.0052 43 .37002 .92902 .39852 .5056 .0765 .7066 .07097 .029					.5365				.63323	29 28
34 36758 9.92993 339525 5.5300 0.753 7.725 0.7001 0.63214 35 0.36735 0.92933 0.39559 2.578 1.0754 2.7135 0.7002 0.63214 36 3.6812 9.9295 3.9656 5.236 0.755 7.7165 0.7002 0.6316 37 3.6839 9.9296 3.3966 5.236 0.736 7.7145 0.7003 0.6316 38 3.6836 9.9295 3.9660 5.214 0.753 7.725 0.7044 0.3133 39 3.6833 9.9295 3.9660 5.214 0.753 7.725 0.7054 0.3166 40 0.36921 0.92935 0.39777 2.5171 1.0760 2.7085 0.0765 0.07054 0.3106 41 3.6948 9.9243 3.9751 5.150 0.761 7.065 0.7076 0.63079 41 3.6948 9.9243 3.3975 5.129 0.763 7.045 0.0707 0.63079 42 3.6975 9.9293 3.3975 5.129 0.763 7.045 0.0707 0.6305 43 3.7002 9.9202 3.39862 5.086 0.765 7.706 0.0707 0.6293 44 3.7029 9.2832 0.39862 5.086 0.765 7.706 0.0707 0.6293 45 0.37036 0.92831 0.39963 5.023 0.766 0.07108 0.62914 46 3.7033 9.2870 3.9996 3.5023 0.766 0.0710 0.62944 47 3.7110 9.2859 3.9963 5.023 0.766 0.6947 0.7141 0.6280 48 3.7137 9.2843 3.9997 5.002 0.770 0.627 0.7151 0.6285 50 0.37191 0.92837 0.40065 2.4960 0.7713 0.6385 0.7152 0.6285 51 3.7218 9.2816 4.0088 4.939 0.774 0.6369 0.7134 0.6285 52 3.7224 9.794 4.0166 4.897 0.776 0.6390 0.7123 0.6280 53 3.7272 9.774 4.0166 4.897 0.776 0.6390 0.70121 0.6285 54 3.7299 9.784 4.0000 4.813 0.781 0.6714 0.0721 0.6267 55 0.37350 0.92731 0.40213 2.4855 0.775 0.6390 0.07227 0.62674 55 0.37461 0.92718 0.4031 4.918 0.775 0.6390 0.07227 0.62674 55 0.37340 0.92731 0.40213 2.4855 0.776 0.6390 0.07227 0.62674 56 0.37461 0.92718 0.4031 4.918 0.775 0.6390 0.77249 0.62620 57 3.7350 0.92731 0.40213 2.4855 0.776 0.6390 0.07227 0.62674 57 3.7			.93020	.39458					.63296	28
35		.36731	.93010		.5322					27
37 36839 9.2907 3.39026 5.236 0.756 7.7145 0.7703 0.3160 38 3.6866 9.2956 3.3960 5.214 0.753 7.7125 0.7044 0.3133 39 3.6893 9.9245 3.3960 5.214 0.753 7.7125 0.7044 0.5133 39 3.6893 9.9245 3.3960 5.5193 0.759 7.705 0.7054 0.5106 40 0.36921 0.92935 0.37727 2.5171 1.0760 2.7085 0.07065 0.63079 41 3.6948 9.924 3.39751 5.150 0.761 7.705 0.7057 0.5052 42 3.5975 9.2913 3.3795 5.129 0.763 7.045 0.7087 0.5052 43 3.7002 9.2902 3.3958 5.108 0.764 7.706 0.7097 0.5298 44 3.7020 9.2832 3.3986 2.5085 0.765 7.706 0.7018 0.6294 45 0.37056 0.92831 0.39896 2.5085 1.0766 2.6936 0.07119 0.62944 46 3.37033 9.2870 3.3930 5.5044 0.768 0.6967 0.7130 0.52917 47 3.7110 9.2859 3.39963 5.502 0.776 0.6947 0.7141 0.6280 48 3.37137 9.2843 3.3997 5.502 0.777 0.6927 0.7151 0.5286 49 3.37164 9.2833 4.0031 4.981 0.771 0.693 0.7102 0.6283 50 0.37191 0.92827 0.40065 2.4960 1.0773 2.6338 0.07173 0.6286 51 3.7218 9.2816 4.0098 4.939 0.0774 0.6809 0.7134 0.6285 52 3.7245 9.2955 4.0132 4.918 0.775 0.639 0.7205 0.6275 53 3.7272 9.2794 4.0166 4.897 0.778 0.6810 0.7216 0.6271 56 3.37336 0.92773 0.40231 2.4855 1.0779 2.6791 0.07227 0.62674 57 3.3736 0.92773 4.0267 4.813 0.780 0.772 0.7238 0.6269 58 3.37407 9.2740 4.0315 4.792 0.783 0.6714 0.7271 0.6256 60 0.37461 0.92718 0.40031 2.4751 1.0785 2.6695 0.07282 0.62539 50 3.37441 9.2720 4.0250 4.472 0.784 0.6714 0.7271 0.6256 60 0.37461 0.92718 0.40031 2.4751 1.0785 2.6695 0.07282 0.62539 50 3.37441 9.2720 4.0250 4.472 0.784 0.6714 0.07271 0.6256 50 0.37461 0.92718 0.40031 2.4751 1.0785 2.6695 0.07282	34	.36758	.92999		.5300					26
37 36839 92907 339026 5236 0.756 7.7145 0.7033 0.3160 38 36866 92956 33960 5214 0.753 7.7125 0.7044 0.5133 39 3.6893 9.9245 3.3694 5.193 0.759 7.705 0.7054 0.5133 40 0.36921 0.92935 0.30727 2.5171 1.0760 2.7085 0.07065 0.63079 41 3.6948 9.924 3.3751 5.150 0.761 7.065 0.7065 0.63079 42 3.6975 9.2913 3.3795 5.129 0.763 7.045 0.7087 0.5052 42 3.5975 9.2913 3.3795 5.129 0.763 7.045 0.7087 0.5052 43 3.7002 9.2902 33952 5.108 0.764 7.026 0.7097 0.5298 44 3.7020 9.2832 3.3986 2.5086 0.765 7.706 0.7018 0.6294 45 0.37036 0.92851 0.39396 2.5085 1.0766 2.6936 0.07119 0.62944 46 3.37033 9.2870 3.3930 5.044 0.768 0.6967 0.7130 0.52917 47 3.7110 9.2859 3.39963 5.5023 0.769 0.6947 0.7141 0.6290 48 3.37137 9.2838 3.40031 4.981 0.771 0.693 0.7102 0.6283 49 3.37164 9.2838 4.4031 4.981 0.771 0.693 0.7102 0.6283 50 0.37191 0.92827 0.40055 2.4960 1.0773 2.6338 0.07173 0.62869 51 3.7218 9.2805 4.4038 4.939 0.774 0.6369 0.7134 0.6285 52 3.7245 9.2905 4.0132 4.918 0.775 0.639 0.7205 0.6275 53 3.7272 9.2794 4.4066 4.897 0.776 0.630 0.7216 0.6271 56 3.3735 9.2751 4.0201 4.813 0.780 0.772 0.0727 0.62674 57 3.37360 9.2773 0.40213 2.4855 1.0779 2.6791 0.07227 0.62674 58 3.37407 9.2749 4.4035 4.4792 0.784 0.6714 0.7271 0.6250 59 3.37434 9.9279 4.4050 4.472 0.784 0.6714 0.7271 0.6250 50 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539 50 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539 50 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539 50 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.6253	35	0.30735								25
38	30									24
39	37	.30339		39020						23
10	30			39000					63766	22 21
41 .369.48 9.924 .39751 .5150 .0761 .7665 .07076 6.3025 42 .36975 .92913 .33795 .5129 .763 .7045 .07087 .63025 43 .37002 .92902 .39828 .5108 .0764 .7026 .07097 .02998 44 .37029 .92892 .39862 .5086 .0765 .7006 .07108 .62971 45 0.37056 .92851 .39936 .5065 1.0766 .26986 .07110 .02894 46 .37033 .92879 .39930 .5044 .0768 .6667 .07130 .62917 47 .37110 .92839 .39967 .5002 .0770 .6947 .07141 .62890 48 .37137 .92834 .39997 .5002 .0770 .6947 .07141 .62863 50 0.37191 .92827 .04055 2.9960 1.0773 .6389 .07162 .62836 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0.63070</td> <td>20</td>									0.63070	20
42 36975 92913 33795 5129 .0763 7045 .07087 .63025 43 3.7002 .92902 .39828 5108 .0764 .7066 .07097 .63025 44 .37029 .92892 .39862 .5086 .0765 .7066 .07108 .62971 45 0.37036 0.92851 0.39862 .5085 1.0766 2.6986 .07119 .052941 47 .37110 .92859 .39930 .5044 .0768 .6967 .07130 .62917 47 .37110 .92859 .39963 .5023 .0769 .6947 .07141 .6280 48 .37137 .92838 .40031 .4981 .0771 .6988 .07162 .62836 50 0.37191 0.92827 .0.40065 2.4960 1.0773 2.6583 .0.07127 .62859 51 .37218 .92816 .40031 .4918 .0775 .6839 .07195 .62755									63053	19
43 37002 92902 539528 5108 0764 7026 07097 62908 44 37029 92832 339862 5086 0765 7006 07108 62971 45 0.37056 0.92831 0.39896 2.5065 1.0766 2.6936 0.07119 0.62944 46 37033 92870 3.9930 5044 0.768 0.6967 0.7113 0.62944 47 37110 92859 3.9963 5023 0.769 0.6947 0.7141 62890 48 3.7137 9.2843 3.9997 5002 0.770 0.077 0.7151 62863 49 3.7164 92833 4.0031 4.991 0.771 6.903 0.7162 6.2836 50 0.37191 0.92837 0.40065 2.4960 1.0773 2.6383 0.07113 0.62859 51 3.7218 9.2816 4.0038 4.939 0.774 6.6849 0.7184 6.6782 52 3.7245 9.2855 4.0132 4.918 0.775 6.849 0.7195 6.2758 53 3.7272 9.7794 4.0166 4.897 0.776 6.859 0.7216 6.2751 54 3.7299 9.2784 4.0200 4.876 0.778 6.8510 0.7216 6.2701 55 0.37350 0.92773 0.40237 2.4855 1.0779 2.6791 0.07227 0.62674 57 3.7380 9.2751 4.0016 4.813 0.781 6.5752 0.7228 6.2647 58 3.7407 9.2740 4.035 4.792 0.783 6.712 0.7228 0.6269 58 3.7407 9.2740 4.035 4.772 0.784 6.6714 0.7271 6.2566 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62533	42						7015			18
44 .37020 .92832 .39862 .5086 .0765 .7066 .07108 .62971 45 0.37056 0.92831 0.39896 2.5065 1.0766 2.6986 0.07119 0.62944 46 .37033 .92870 .39930 .5044 .0768 .6967 .07130 .62917 47 .37110 .92859 .39963 .5022 .0769 .6947 .07141 .62890 48 .37137 .92839 .39997 .5002 .0770 .6927 .07151 .62836 50 0.37191 .92827 .40031 .4981 .0771 .6938 .07162 .62836 51 .37218 .92816 .40938 .4939 .0774 .6869 .07195 .62752 52 .372218 .92855 .40132 .4918 .0775 .6849 .07195 .62755 53 .37272 .92794 .40166 .4897 .0776 .6839 .07205 .627	1 43									17
45		37020		.39862	.5086					16
46		0.37056		0.39896	2.5065		2.6986		0.62914	15
47 .37110 .92859 .39963 .5023 .0769 .6947 .07111 .62863 48 .37137 .92848 .39997 .5002 .0770 .6927 .07151 .62863 49 .37164 .92838 .40031 .4981 .0771 .6938 .07162 .62836 50 0.37191 0.92827 0.40065 2.4960 1.0773 2.65838 0.07173 0.62859 51 .37218 .92816 .4098 .4939 .0774 .6859 .07185 .62782 52 .372245 .92955 .40132 .4918 .0775 .6849 .07195 .62755 53 .37272 .92794 .40166 .4897 .0776 .6839 .07205 .62728 54 .37299 .92784 .40200 .4876 .0778 .6810 .07216 .62701 55 .37335 .92762 .40267 .4834 .0780 .6772 .07238 .6647	46	.37033		.39930		.0768			.62917	14
49 .37164 .92838 .40031 .4981 .0771 .6993 .07162 .62836 50 0.37191 .92827 .04065 2.4960 1.0773 2.6383 0.07173 0.62809 51 .37218 .92816 .40098 .4939 .0774 .6369 .07184 .62782 52 .37242 .92794 .40166 .4397 .0776 .6330 .07205 .62728 54 .37299 .92784 .40200 .4876 .0778 .6810 .07216 .62701 55 0.37326 0.92773 .40231 2.4355 1.07792 2.6791 .07227 0.62674 56 .37333 .92762 .40267 .4834 .0780 .6772 .07238 .62647 57 .37380 .92751 .40261 .4813 .0781 .6752 .07249 .626267 58 .37407 .92740 .40315 .4792 .0783 .6731 .07241	47				.5023				.62890	13
49 .37164 .92838 .40031 .4981 .0771 .6993 .07162 .62836 50 0.37191 .92827 .04065 2.4960 1.0773 2.6383 0.07173 0.62809 51 .37218 .92816 .40098 .4939 .0774 .6369 .07184 .62782 52 .37242 .92794 .40166 .4397 .0776 .6330 .07205 .62728 54 .37299 .92784 .40200 .4876 .0778 .6810 .07216 .62701 55 0.37326 0.92773 .40231 2.4355 1.07792 2.6791 .07227 0.62674 56 .37333 .92762 .40267 .4834 .0780 .6772 .07238 .62647 57 .37380 .92751 .40261 .4813 .0781 .6752 .07249 .626267 58 .37407 .92740 .40315 .4792 .0783 .6731 .07241	48	.37137	.92343		.5002		.6927		.62863	12
50 0.37191 0.9282rj 0.40055 2.4960 1.0773 2.6383 0.07173 0.62809 51 3.37218 9.2816 4.0098 4.939 0.074 6.689 0.07184 6.6829 0.07184 6.6830 0.07195 6.6785 5.33 0.37272 9.2794 4.0160 4.897 0.076 6.6830 0.7205 6.62785 5.37299 9.2734 4.0200 4.876 0.0778 6.6310 0.07216 0.6270 5.2701 5.5 0.37335 0.9275 4.0207 4.833 1.0790 2.6791 0.07227 0.62674 5.7 3.7350 9.2751 4.0201 4.813 0.0781 .6752 0.07249 6.6263 5.8 3.7407 9.2740 4.0355 4.772 0.784 .6714 0.07211 6.2593 5.9 3.7444 9.2729 4.0260 4.472 0.784 .6714 0.07211 .62566 0.037461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62533 <	49	.37164	.92838	.40031	.4931	.0771	.6908	.07162	.62836	11
51 .37218 .92816 .40098 .4939 .0774 .6869 .07184 .62782 52 .37245 .92805 .40132 .4918 .0775 .6839 .07195 .62728 53 .37272 .92794 .40166 .4897 .0776 .6830 .07205 .62728 54 .37299 .92734 .40200 .4876 .0778 .6810 .07216 .62701 55 0.37326 .92773 .40231 2.4855 I.07792 .26791 .07227 .02674 56 .37333 .92762 .40267 .4834 .0780 .6772 .07238 .62647 57 .37380 .92751 .40201 .4813 .0781 .6752 .07249 .62620 58 .37407 .92740 .40335 .4772 .0784 .6714 .07271 .62560 60 0.37461 0.92718 0.40403 2.4751 I.0785 2.6695 0.07282 0.	50	0.37191								10
53 3,7272 92794 .40166 .4897 .0776 .6830 .07205 .62725 54 .37299 .92784 .40200 .4876 .0778 .6810 .07216 .62701 55 0.37326 0.92773 0.40237 2.4855 1.0779 2.6791 0.07227 0.62674 56 .37333 .92761 .40267 .4834 .0780 .6772 .07238 .62647 57 .37380 .92751 .40201 .4813 .0781 .6752 .07249 .62620 58 .37407 .92740 .40335 .4792 .0783 .6733 .07260 .62593 59 .37434 .92729 .40260 .4772 .0784 .6714 .07271 .62566 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539		.37218			-4939					9
54 .37299 .92784 .40200 .4876 .0778 .6810 .07216 .62701 55 0.37326 0.92773 0.40231 2.4855 I.0779 2.6791 0.07227 0.62674 56 .37353 .92762 .40267 .4833 .0780 .6772 .07238 .62647 57 .37380 .92751 .40201 .4813 .0781 .6752 .07249 .6269 58 .37407 .92740 .40315 .4792 .0783 .6733 .07260 .62593 59 .37434 .92720 .40250 .4772 .0734 .6714 .07271 .62566 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539					.4918					8
55 0.37326 0.92773 0.4023 2.4855 1.0779 2.6791 0.07227 0.62674 56 .37353 .92762 .40267 .4834 .0780 .6772 .07238 .62647 57 .37380 .92751 .40201 .4813 .0781 .6752 .07249 .62620 58 .37407 .92740 .40335 .4792 .0783 .6733 .07260 .62593 59 .37434 .92727 .40267 .4772 .0734 .6714 .07271 .62566 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539	53									7 6
56 .37353 .92762 .40267 .4334 .0780 .67772 .07238 .62647 57 .37380 .92751 .40201 .4813 .0781 .6752 .07249 .62620 58 .37407 .92740 .40335 .4792 .0783 .6733 .07260 .02593 59 .37434 .92729 .40250 .4772 .0784 .6714 .07271 .62566 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539	54				.4870					0
57 .37380 .92751 .40701 .4813 .0781 .6752 .07249 .62620 58 .373407 .92740 .4035 .4792 .0783 .6733 .07260 .62593 59 .37434 .92729 .40260 .4772 .0734 .6714 .07271 .62566 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539	55				2.4355					5
59 .37474 .92727 .40250 .4772 .0784 .6714 .07271 .02506 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539	50	•37353	.92702		.4334					4
59 .37474 .92727 .40250 .4772 .0784 .6714 .07271 .02506 60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539	57									3
60 0.37461 0.92718 0.40403 2.4751 1.0785 2.6695 0.07282 0.62539	50	.37407			4792	10703				2 I
-	60	0.37461		0.40403	2.4751	1.0785				اۃ
M Cosine Sine Cotan. Tan. Cosec. Secant Vrs. Cos. Vrs. Sin.										М

111°

Natural Trigonometric Functions

157°

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.37461	0.92718	0.40403	2.4751	1.0785	2.6695	0.07282	0.62539	60
1	.37488		.40436	.4730	.0787	.6675	.07292	.62512	59
2	.37514	.92696	.40170	.4709	.0788	.6656	.07303	.62485	58
3	37541		.40504	.4689	.0789	.6637	.07314	. 62458	57
4	.37568		.40538	.4668	.0790	.6618	.07325	.62431	56
5 6	0.37595		0.40572	2.4647	1.0792	2.6599	0.07336	0.62404	55
7	.37649		.40640		.0794	.6561	.07347	.62377 .62351	54 53
7 8	.37676		.40673	4586	.0795	.6542	.07369	.62324	52
9	.37703		.40707	.4565	.0797	.6523	.07380	.62297	51
10	0.37730	0.92609	0.40741	2.4545	1.0798	2.6504	0.07391	0.62270	50
11	-37757	. 92598	.40775	.4525	.0799	.6485	.07402	.62243	49
12	37784		.40809	.4504	1080.	.6466	.07413	.62216	48
13	.37811		.40843	.4484	.0802	.6447	.07424	.62189	47
14	.37838 o.37865		0.40911	2.4443	1.0804	2.6410	0.07435	.62162 0.62135	46 45
16	.37892	.92543	.40945	.4423	.0806	.6391	.07457	.62108	43
17	.37919		.40979	.4403	.0807	.6372	.07468	.62081	43
18	.37946		.41013	.4382	.0808	.6353	.07479	.62054	42
19	.37972	.92510	.41047	.4362	.0810	.6335	.07490	.62027	41
20	0.37999		0.41081	2.4342	1.0811	2.6316	0.07501	0.62000	40
21	.38026	.92488	.41115	.4322	.0812	.6297	.07512	.61974	39
22 23	.38053	.92477	.41149	.4302	.0813	.6279 .6260	.07523	.61947	38
24	.38107		.41103	.4262	.0816	.6242	.07534	.61893	37 36
25	0.38134		0.41251	2.4242	1.0817	2.6223	0.07556	0.61866	35
26	.38161	.92432	.41285	.4222	.0819	.6205	.07567	.61839	34
27	. 38188	.92421	.41319	.4202	,0820	.6186	.07579	.61812	33
28	.38214	.92410	.41353	.4182	.0821	.6168	.07590	.61785	32
29	.38241	.92399	.41387	.4162	.0823	.6150	.07601	.61758	31
30	0.38268	0.92388	0.41421	2.4142	1.0824	2.6131	0.07612	0.61732	30
3I 32	.38295	.92377 .92366	.41455	.4122	.0825	.6113	.07623	.61705 .61678	29 28
33	.38349	.92354	.41524	.4083	.0828	.6076	.07645	.61651	20 27
34	.38376	.92343	.41558	.4063	.0829	.6058	.07657	.61624	26
35	0.38403	0.92332	0.41592	2.4043	1.0830	2.6040	0.07668	0.61597	25
36	.38429	.92321	.41626	.4023	.0832	.6022	.07679	.61570	24
37	.38456	.92310	.41660	.4004	.0833	.600(3	.07690	.61544	23
38	. 38483	.92299	.41694	.3984	.0834	.5985	.07701	.61517	22
39 40	.38510	.92287 0.92276	.41728	.3964	.0836 1.0837	.5967	.07712	.61490	2I 20
41	.38564	.92265	.41762	2.3945 .3925	.0838	2.5949 .5931	0.07724	.61436	19
42	.38591	.92254	.41831	.3906	.0840	.5913	.07746	.61409	18
43	.33617	.92242	.41865	.3886	.0841	.5895	.07757	.61382	17
44	. 38644	.92231	.41899	.3867	.0842	. 5877	.07769	.61356	16
45	0.38671	0.92220	0.41933	2.3847	1.0844	2.5859	0.07780	0.61329	15
46	.38698	.92209	.41968	. 3828	.0845	.5841	.07791	.61302	14
47	.33725	.92197	.42002	.3808	.0846	.5823	.07802	.61275	13
48 49	.38751	.92186 .92175	.42036	.3789 .3770	.0847	.5805	.07814	.61248 .61222	12 11
50	0.38805	0.92175	0.42105	2.3750	1.0850	2.5770	0.07836	0.61195	10
51	.38832	.92152	.42139	.3731	.0851	.5752	.07847	.61168	~ I
52	.38859	.92141	.42173	.3712	.0853	.5734	.07859	.61141	9
53	.38886	.92130	.42207	.3692	.0854	.5716	.07870	.61114	7 6
54	.38912	.92118	.42242	.3673	.0855	.5699	.07881	.61088	6
55 56	0.38939	0.92107	0.42276	2.3654	1.0857	2.5681	0.07893	0.61061	5
50	. 38966	.92096	.42310	.3635	.0858	.5663	.07904	.61034 .61007	4
57 58	.39019	.92034	.42344	.3597	.0861	.5628	.07915	.60980	3 2
59	.39046	.92062	.42413	.3577	.0862	.5610	.07938	.60954	í
59 60	0.39073	0.92050	0.42447	2.3558	1.0864	2.5593	0.07949	0.60927	ô
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M
1					1 1	!			

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24	Sine 0.39073 .39100 .39126 .39153 .39180 0.39207 .39234	0.92050 .92039 .92028 .92016	O.42447 .42482 .42516	Cotan.	Secant 1.0864	Cosec.	Vrs. Sin.	Vrs. Cos.	M 60
1 2 3 4 5 6 7 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	.39100 .39126 .39153 .39180 0.39207 .39234	.92039 .92028 .92016	.42482			2.5593	0.07949	0 60027	
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 23 24 25	.39126 .39153 .39180 0.39207 .39234	.92028 .92016		.3539	-00-				
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	.39153 .39180 0.39207 .39234	.92016	.42516		.0865	.5575	.07961	.60900	59
4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	.39180 0.39207 .39234			.3520	.0866	.5558	.07972	.60873	59 58
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	0.39207 .39234		.42550	.3501	.0868	.5540	.07984	.60846	57
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	.39234	.92005	. 42585	.3482	.0869	. 5523	.07995	.60820	56
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		0.91993	0.42619	2.3463	1.0870	2.5506	0.08006	0.60793	55
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25		.91982	. 42654	-3445	.0872	.5488	.08018	.60766	54
9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	39260	.91971	. 42688	.3426	.0873	.5471	.08029	. 60739	53
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	.39287	.91959	. 42722	.3407	.0874	-5453	.08041	.60713	52
11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	.39314	.91948	. 42757	.3388	.0876	.5436	.08052	.60686	51
12 13 14 15 16 17 18 19 20 21 22 23 24	0.39341	0.91936	0.42791	2.3369	1.0877	2.5419	0.08063	0.60659	50
13 14 15 16 17 18 19 20 21 22 23 24 25	.39367	.91925	.42826	.3350	.0878	.5402	.08075	.60632	49 48
14 15 16 17 18 19 20 21 22 23 24 25	.39394	.91913	.42860	.3332	.0881	.5384	.08080		48
15 16 17 18 19 20 21 22 23 24 25	.39421	.91902	.42894	.3313	.0882	.5367	.08109	.60579 .60552	47 46
16 17 18 19 20 21 22 23 24 25	.39448	0.91879	0.42963	2.3276	1.0884	.5350	0.08121	0.60526	40
17 18 19 20 21 22 23 24 25	0.39474 .39501	.91868	.42998	.3257	.0835	2.5333 .5316	.08132	.60499	45 44
18 19 20 21 22 23 24 25	.39528	.91856	.43032	.3238	.0886	.5299	.08132	.60472	43
19 20 21 22 23 24 25	.39554	.91845	.43067	.3220	.0888	.5281	.08155	.60415	43
20 21 22 23 24 25	.39581	.91833	.43101	.3201	.0389	.5264	.08167	.60419	41
2I 22 23 24 25	0.39608	0.91822	0.43136	2.3183	1.0891	2.5247	0.08178	0.60392	40
22 23 24 25	.39635	.91810	.43170	.3164	.0892	.5230	.03190	.60365	39
23 24 25	.39661	.91798	.43205	.3145	.0893	.5213	.08201	.60339	38
24	.39688	.91787	.43239	.3127	.0895	.5196	,08213	.60312	37
25	.39715	.91775	. 43274	.3109	.0396	.5179	.08224	.60285	36
1 26	0.39741	0.91764	0.43308	2.3090	1.0897	2.5163	0.08236	0.60258	35
	.39768	.91752	.43343	.3072	.0899	.5146	.08248	.60232	34
27	39795	.91741	43377	.3053	.0900	.5129	.08259	.60205	33
28	.39821	.91729	.43412	.3035	.0902	.5112	.08271	.60178	32
29	.39848	.91718	-43447	.3017	.0903	.5095	.08282	.60152	31
30	0.39875	0.91706	0.43481	2.2998	1.0904	2.5078	0.08294	0.60125	30
31	.39901	.91694	. 43516	. 2980	.0906	.5062	. 08306	.60098	29 28
32	.39928	.91683	.43550	. 2962	.0907	.5045	.08317	.60072	28
33	-39955	.91671	. 43585	.2944	.0908	. 5028	.08329	.60045	27
34	.39981	.91659	.43620	. 2925	.0910	.5011	.08340	,60018	26
35 36	0.40008	0.91648	0.43654	2.2907	1.0911	2.4995	0.08352	0.59992	25
30	. 40035	.91636	. 43689	. 2889	.0913	.4978	.08364	. 59965	24
37 38	.40061	.91625	. 43723	. 2871	.0914	.4961	.08375	. 59938	23
38	. 40088	.91613	. 43758	. 2853	.0915	.4945	.08387	.59912	22
39	.40115	.91601	.43793	. 2835	.0917	. 4928	0.08399	.59885	21
	0.40141	0.91590	0.43827	2.2817	1.0918	2.4912	.08422	0.59858	20
41	. 40168	.91578	.43897	. 2799	.0920	.4879	.08434	.59832	19 18
42	.40195	.91566	.43932	. 2763	.0921	.4862	.08445	.59778	17
43	.40248	.91554	.43952	.2745	.0924	.4846	.08457	.59752	16
1 44 1	0.40275	0.91531	0.44001	2,2727	1.0925	2.4829	0.08469	0.59725	15
45 46	.40301	.91519	.44036	.2709	.0927	.4813	.08480	.59699	14
1 47	.40328	.91508	.44070	.2691	.0928	.4797	.08492	.59672	13
47 48	.40354	.91496	.44105	. 2673	.0929	.4780	. 08504	.59645	12
49	.40381	.91484	.44140	. 2655	.0931	.4764	.08516	.59619	II
	0.40408	0.91472	0.44175	2.2637	1.0932	2.4748	0.08527	0.59592	IO
51	.40434	.91461	.44209	.2619	.0934	. 4731	.08539	.59566	0
52	.40461	.91449	.44244	.2602	.0935	.4715	.08551	.59539	9 8
53	.40487	.91437	.44279	. 2584	.0936	.4699	. 08563	.59512	7
54	.40514	.91425	.44314	. 2566	.0938	.4683	.08575	. 59486	7 6
55	0.40541	0.91414	0.44319	2.2548	1.0939	2.4666	0.08586	0.59459	5
55 56	.40567	.91402	.44383	.2531	.0941	.4650	.08598	.59433	5 4 3 2
57	.40594	.91390	.44418	. 2513	.0942	.4634	.08610	. 59406	3
58	40620	.91378	.44453	. 2495	.0943	.4618	.08622	.59379	
59			14400	. 2478	.0945	.1602	. 08634	-59353	I
60	.40647	.91366	44458	. 24/0					
M		0.91354	.44488 0.44523	2.2460	1.0946	2.4586	0.08645	0.59326	0

240

43			Naturai	Trigono	metric r	unctions			100
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Ccs.	M
-	0.40674	0.91354	0.44523	2.2460	1.0946	2.4586	0.08645	0.59326	60
1	.40700	.91343	.44558	.2443	.0948	.4570	.08657	.59300	59
2	.40727	.91331	-44593	.2425	.0949	-4554	.08669	.59273	59 58
3	.40753	.91319	.44627	.2408	.0951	.4538	.08681	.59247	57
4 5 6	.40780	.91307	.44662	.2390	.0952	.4522	.08693	.59220	56
5	0.40806	0.91295	0.44697	2.2373	1.0953	2.4506	0.08705	0.59193	55
6	.40833	.91283	44732	.2355	.0955	.4490	.08716	.59167	54
8	.40860	.91271	.44767	.2338	.0956	-4474	.08728	.59140	53
	.40886	.91260	.44802	.2320	.0958	.4458	.08740	.59114	52
9	.40913	.91248	.44837	.2303 2,2286	.0959	.4442 2.4426	0.08752	.59087 0.59061	51
11	0.40939 .40966	0.91236	0.44872	.2268	1.0961		.08776	.59034	50 49
12	.40992	.91224	.44907	.2251	.0963	.4411	.08788	.59008	48
13	.41019	.91200	44977	.2234	.0965	.4379	.08800	.58981	47
14	.41045	.91188	.45012	.2216	.0966	.4363	.08812	.58955	46
15	0.41072	0.91176	0.45047	2.2199	1.0968	2.4347	0.08824	0.58928	45
ΙŐ	.41098	.91164	.45082		.0969	.4332	.08836	.58901	44
17	.41125	.91152	.45117	.2165	.0971	.4316	.08848	.58875	43
18	.41151	.91140	.45152	.2147	.0972	.4300	.08860	.58848	42
19	.41178	.91128	.45187	. 2130	.0973	.4285	.08872	. 58822	41
20	0.41204	0.91116	0.45222		1.0975	2.4269	0.08884	0.58795	40
21	.41231	.91104	.45257	.2096	.0976	.4254	.08896	. 58769	39 38
22	.41257	.91092	.45292		.0978	.4238	.08908	.58742	38
23	.41284	.91080	-45327	.2062	.0979	.4222	.08920	.58716	37
24	.41310	.91068	.45362		.0981	.4207	.08932	. 58689 0.58663	36
25 26	0.41337	.91056	0.45397 .45432	2,2028	.0982	2.4191	0.08944	.58636	35 34
27	.41303	.91044	.45452	.1994	.0985	.4160	.08968	.58610	33
28	.41416	.91032	.45502		.0986	.4145	.08980	.58584	32
29	.41443	.91008	45537	1960	.0988	.4130	.08992	.58557	3r
30	0.41469	0.90996	0.45573		1.0989	2.4114	0.09004	0.58531	30
31	.41496	.90984	.45608		.0991	.4099	.09016	.58504	29 28
32	.41522	.90972	.45643	.1909	.0992	.4083	.09028	.53478	28
33	.41549	.90960	.45678	.1892	.0994	.4068	.09040	.58451	27
34	.41575	.90948	.45713	.1875	.0995	.4053	,09052	.58425	26
35 36	0.41602	0.90936	0.45748	2.1859	1.0997	2.4037	0.09064	0.58398	25
36	.41628	.90924	.45783	.1842	.0998	.4022	.09076	.58372	24
37	.41654	.90911	.45819		.1000	.4007	.09088	.58345	23
38	.41681	.90899	.45854	.1808	.1001	.3992	.09101	.58319	22 2I
39	.41707	0.90887	.45889	.1792 2.1775	1.1003	.3976 2.3961	0.09113	.58292 0.58266	20
41	0.41734	.90863	.45960		.1005	.3946	.09137	.58240	19
42	.41787	.90851	45995		.1007	.3931	.09149	.58213	18
43	.41813	.90839	.46030		.1008	.3916	.09149	.58187	17
44	.41839	.90826	.46065	.1708	.1010	.3901	.09173	.58160	16
45	0.41866	0.90814	0.46101	2.1692	1.1011	2.3886	0.09186	0.58134	15
46	.41892	.90802	.46136	.1675	.1013	.3871	.09198	.58108	14
47	.41919	.90790	.46171	.1658	.1014	. 3856	.09210	.58081	13
48	.41945	.90778	.46206	.1642	.1016	3841	.09222	.58055	12
49	.41972	.90765	.46242	.1625	.1017	.3826	.09234	.58028	II
50	0.41998	0.90753	0.46277	2.1609	1.1019	2.3811	0.09247	0.58002	10
51	.42024	.90741	.46312	.1592	.1020	.3796	.09259	-57975	9 8
52	.42051	.90729	.46348	.1576	.1022	.3781	.09271	-57949	٥
53 54	.42077	.90717	.40383	.1559	.1023	.3766	.09283	.57923 .57896	7
54	0.42130	0.90692	0.46454	.1543 2.1527	1.1026	2.3736	0.09290	0.57870	2
55 56	.42156	.90680	.46489	.1510	.1028	.3721	.09308	.57844	3
57	.42183	.90668	.46524	.1494	.1028	.3706	.09320	.57817	3
53	.42209	.90655	.46560	.1478	.1031	.3691	.09345	.57791	5 4 3 2
59 60	.42235	.90643	.46595	.1461	.1032	.3677	09357	.57764	
60	0.42262	0.90631	0.46631	2.1445	1.1034	2.3662	0.09369	0.57738	0
			I						
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

25°

154°

M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.42262	0.90631	0.46631	2.1445	1.1034	2.3662	0.09369	0.57738	60
I	.42288		.46666		. 1035	.3647	.09381	.57712	59
2	.42314	.90606	.46702		. 10,37	.3632	.09.394	.57685	58
3	.42341	.90594	.46737	.1396	.1038	.3618	.09406	.57659	57
4	.42367	.90581	.46772	.1380	.1040	.3603	.09418	.57633	56
5	0.42394	0.90569	0.46808 .46843	2.1364	1.1041	2.3588	0.09431	0.57606	55
7	.42446	.90544	.46879	.1331	.1043	-3574 -3559	.09443	.57580	54 53
7 8	.42473	.90532	.46914	.1315	.1046	.3544	.09468	.57527	52
9	.42499	.90520	.46950		.1047	.3530	.09480	.57501	51
10	0.42525	0.90507	0.46985	2.1283	1.1049	2.3515	0.09492	0.57475	50
11	.42552	.90495	.47021	.1267	.1050	.3501	.09505	.57448	49
12	.42578	.90483	.47056	.1251	.1052	.3486	.09517	.57422	48
13	.42604	.90470 .90458	.47092	.1235	.1053	.3472	.09530	.57396	47
15	0.42657	0.90445	0.47163		1.1055	.3457 2.3443	0.09554	.57369 0.57343	45
16	.42683	.90433	.47199	.1187	.1058	.3428	.09567	.57317	44
17	.42709	.90421	.47234	.1171	.1059	.3414	.09579	.57290	43
18	.42736	.90408	.47270	.1155	.1061	-3399	.09592	.57264	42
19	.42762	.90396	47305	.1139	.1062	.3385	.09604	.57238	41
20 21	0.42788	0.90383	0.47341	2.1123	1.1064	2.3371	0.09617	0.57212	40
22	.42815	.90371	.47376	.1107	.1065	.3356	.09629	.57185 .57159	39 38
23	.42867	.90336	.47448	.1076	.1068	.3342	.09654	.57133	37
24	.42893	.90333	.47483	.1060	.1070	.3313	.09666	.57106	36
25	0.42920	0.90321	0.47519	2.1044	1.1072	2.3299	0.09679	0.57080	35
26	.42946	.90308	.47555	.1028	.1073	.3285	.09691	.57054	34
27	.42972	.90296	.47590	.1013	.1075	.3271	.09704	.57028	33
28	.42998	.90283	.47626	.0997	.1076	.3256	.09716	.57001	32
30	0.43025	.9027I 0.90258	.47662 0.47697	.0981	1.1078	.3242 2.3228	.09729 0.0974I	.56975 0.56949	31 30
31	.43077	.90246	47733	.0950	.10/9	.3214	.09754	.56923	29
32	.43104	.90233	.47769	.0934	.1082	.3200	.09766	.56896	28
33	.43130	.90221	.47805	.0918	.1084	.3186	.09779	.56870	27
34	.43156	.90208	.47840	.0903	.1085	.3172	.09792	.56844	26
35	0.43182	0.90196	0.47876	2.0887	1.1087	2.3158	0.09804	0.56818	25
36 37	.43208 .43235	.90183	.47912	.0872 .0856	.1088	.3143	.09817	.56791 .56765	24 23
38	.43251	.90171	.47948 .47983	.0840	.1090	.3115	.09842	.56739	23
39	.43287	.90145	.48019	.0825	1093	.3101	.09854	.56713	21
40	0.43313	0.90133	0.48055	2.0809	1.1095	2.3087	0.09867	0.56686	20
41	.43340	.90120	.48091	.0794	1.1096	.3073	.09880	.56660	19
42	.43366	.90108	.48127	.0778	.1098	3059	.09892	.56634	18
43 44	-43392	.90095	.48162 .48198	.0763	.1099	.3046	.09905	.56608 .56582	17 16
45	.43418	0.90070	0.48234	2.0732	1.1102	2.3018	0.09930	0.56555	15
46	.43471	.90057	.48270	.0717	.1104	.3004	.09943	.56529	14
47	.43497	.90044	.48306	.0701	.1106	.2990	.09955	.56503	13
48	·43523	.90032	. 48342	.0686	.1107	. 2976	.09968	.56477	12
49	.43549	.90019	.48378	.0671	.1109	.2962	.09981	.56451	11
50	0.43575 .43602	0.90006	0.48414	2.0655	1.1110	2.2949	0.09993	0.56424	10
51 52	.43002	.89994 .89981	.48449	.0040	.1112	.2935	010001.	.56398	9 8
53	.43654	.89968	.48521	.0609	.1115	.2907	.10031	.56346	7 1
54	.43680	.89956	.48557	.0594	.1116	.2894	.10044	.56320	7 6
55 56	0.43706	0.89943	0.48593	2.0579	1.1118	2.2880	0.10057	0.56294	5
56	43732	.89930	.48629	.0564	.1120	.2866	.10070	. 56267	4
57	-43759	.89918	.48665	.0548	.1121	.2853	.10082	.56241	3
58	.43785	.89905	.48701	.0533	.1123	.2839	.10095	.56215 .56189	1
59 60	0.43837	0.89879	0.48773	2.0503	1.1126	2.2812	0.10121	0.56163	: i
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.		M
	Comis	Sille	Count.	I au.	Cusac.	Secant	7.3. Cos.	113. 011.	•
4 4 50									640

115°

,									
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
-	0.43837	0.89879	0.48773	2.0503	1.1126	2.2812	0.10121	0.56163	60
ī	.43863	.89867	.48809	.0488	.1127	.2798	.10133	.56137	
2	.43889	89854	.48845	.0473	.1129	.2784	.10146	.56111	59 58
3	.43915	.89841	.48881	.0458	.1131	.2771	.10159	.56084	57
4	.43942 0.43968	.89828 0.89815	.48917 0.48953	2.0427	1.1132	.2757 2.2744	0.10172	.56058 0.56032	56 55
5 6	43994	.89803	.48989	.0412	.1135	.2730	. 10197	.56006	54
7 8	.44020	.89790	.49025	.0397	.1137	.2717	.10210	.55980	53
	.44046	.89777	.49062	.0382	.1139	.2703	.10223	-55954	52
10	.44072	.89764	.49098	.0367	.1140	.2690 2.2676	.10236	.55928	51
111	0.44098	0.89751 .89739	0.49134	2.0352	1.1142	.2663	.10261	0.55902	50 49
12	.44150	.89726	.49206	.0323	.1145	.2650	.10274	.55849	48
13	.44177	.89713	.49242	.0308	.1147	.2636	.10287	.55823	47
14	.44203	.897∞	. 49278	.0293	.1148	.2623	.10300	-55797	46
15 16	0.44229	0.89687 .89674	0.49314	2.0278	1.1150	2.2610	0.10313	0.55771	45
17	.44255	.89661	.49351	.0248	.1153	.2596	.10328	.55745 .55719	44 43
18	.44307	.89649	.49423	.0233	.1155	.2570	.10351	.55693	42
19	.44333	.89636	.49459	.0219	.1156	.2556	.10364	.55667	41
20	0.44359	0.89623	0.49495	2.0204	1.1158	2.2543	0.10377	0.55641	40
2I 22	.44385	.89610 .89597	.49532 .49568	.0189	.1159	.2530	.10390	.55615	39 38
23	-44437	.89584	.49504	.0174	.1163	.2517	.10403	.55562	37
24	.44463	.89571	.49640	.0145	.1164	.2490	.10429	.55536	36
25	0.44489	0.89558	0.49677	2.0130	1.1166	2.2477	0.10442	0.55510	35
26	.44516	.89545	.49713	.0115	.1167	.2464	.10455	.55484	34 33
27	.44542 .44568	.89532 .89519	.49749 .49785	.0101	.1169	.2451	.10468	.55458 .55432	33 32
29	44594	.89506	.49822	.0071	.1172	.2425	.10493	.55406	31
30	0.44620	0.89493	0.49858	2.0057	1.1174	2,2411	0.10506	0.55380	30
31	.44646	.89480	.49894	.0042	.1176	.2398	.10519	-55354	29
32	.44672 .44698	.89467	.49931 .49967	.0028	.1177	.2385	.10532	.55328	28
33	.44724	.89454 .89441	.50003	1.9998	.1179	.2372	.10545	.55302	27 26
35	0.44750	0.89428	0.50040	1.9984	1.1182	2.2346	0.10571	0.55250	25
35 36	.44776	.89415	.50076	.9969	.1184	-2333	.10584	.55224	24
37	.44802	.89402	.50113	∙9955	.1185	.2320	.10598	.55198	23
38	.44828 .44854	.89389 .89376	.50149	.9940	.1187	.2307	.10611	.55172	22 21
40	0.44880	0.89363	0.50222	1.9912	1.1190	2.2282	0.10637	0.55146	20
41	.44906	.89350	.50258	.9897	.1192	. 2269	.10650	.55094	19
42	.44932	.89337	.50295	.9883	.1193	. 2256	.10663	.55068	18
43	.44958	.89324 .89311	.50331	.9868 .9854	.1195	.2243	.10676	.55042	17
44	0.45010	0.89298	.50368	1.9840	1,1198	.2230 2.2217	0.10689	.55016 0.54990	16 15
46	.45036	.89285	.50441	.9825	,1200	.2204	.10715	.54964	14
47	.45062	.89272	.50477	.9811	.1202	.2192	.10728	.54938	13
48	.45088	.89258	.50514	.9797	.1203	.2179	.10741	.54912	12
49 50	.45114 0.45140	.89245 0.89232	0.50550	.9782 1.9768	1.1205	.2166 2.2153	0.10754	.54886 o.54860	11
51	.45166	.89219	.50623	.9754	,1208	.2141	.10781	.54834	
52	.45191	.89206	.50660	9739	.1210	.2128	.10794	.54808	9
53	.45217	.89193	.50696	.9725	.1212	.2115	.10807	.54782	7
54	.45243	.89180 0.89166	.50733 0.50769	.9711	.1213	.2103	.10820	.54756	٥١
55 56	0.45269 -45295	.89153	.50806	.9683	1.1215	2.2090	0.10833	0.54730 .54705	5 4
57	.45321	.89140	.50843	.9668	.1218	.2065	.10860	.54679	3
58	-45347	.89127	.50879	.9654	.1220	, 2052	.10873	.54653	3 2
59 60	·45373	.89114	.50916	.9640	.1222	.2039	.10886	.54627	1
	0.45399	0.89101	0.50952	1.9626	1.1223	2.2027	0.10899	0.54601	
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М
	1		, ,		1		i I		

116° 63°

270

152°

•			Ivaturar	Tilgono	шепіс г	unctions			102
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.45399	0.89101	0.50952	1.9626	1.1223	2,2027	0.10899	0.54601	60
I	.45425	.89087	.50989	.9612	.1225	.2014	.10912	·54575	
2	·4545I	.89074	.51026	.9598	.1226	.2002	.10926	.54549	59 58
3	-45477	.89061	.51062	.9584	.1228	. 1989	.10939	.54523	57
5 6	.45503	.89048	.51099	.9570	.1230	.1977	.10952	-54497	56
5	0.45528	0.89034	0.51136	1.9556	1.1231	2.1964	0.10965	0.54471	55
0	.45554 .45580	.89021	.51172	.9542 .9528	.1233	.1952	.10979	.54445	54
7 8	.45606	.88995	.51209	.9526	.1235	.1939	.10992	.54420 .54394	53 52
9	.45632	.88931	.51283	.9500	.1238	.1914	.11018	.54368	51
10	0.45658	0.88968	0.51319	1.9486	1.1240	2.1902	0.11032	0.54342	50
11	.45684	.88955	.51356	.9472	.1242	. 1889	.11045	.54316	49
12	.45710	.88942	.51393	. 9458	.1243	. 1877	.11058	.54290	48
13	.45736	.88928	.51430	.9444	.1245	. 1865	.11072	.54264	47
14	.45761	.88915	.51466	.9430	.1247	. 1852	.11085	.54238	46
15	0.45787	0.88902	0.51503	1.9416	1.1248	2.1840	0.11098	0.54213	45
16	.45813	.88838 .88875	.51540	. 9402	.1250	.1828	.11112	.54187	44
17	.45839 .45865	.88362	.51577	.9388	.1252	. 1815	.11125	.54161	43 42
19	.45891	.83343	.51651	. 9375 . 9361	. 1253 . 1255	.1791	.11138	.54135	41
20	0.45917	0.88835	0.51687	1.9347	1.1257	2.1778	0.11165	0.54083	40
21	.45912	.88322	.51724	.9333	.1258	.1766	.11178	.54057	39
22	.45968	.88803	.51761	.9319	,1260	.1754	.11192	.54032	.38
23	.45994	.88795	.51798	.9306	. 1262	.1742	.11205	.54006	37 36
24	.46020	.88781	.51835	.9292	.1264	.1730	.11218	.53980	36
25	0.46046	0.88768	0.51872	1.9278	1.1265	2.1717	0.11232	0.53954	35
26	.46072	.88755	.51909	.9264	.1267	.1705	.11245	.53928	34
27	.46097	.88741	.51946	.9251	.1269	. 1693	.11259	.53902	33 32
28 29	.46123 .46149	.88728 .88714	.51983	.9237	.1270	. 1681 . 1669	.11272	.53877 .53851	32 31
30	0.46175	0.88701	.52020 0.52057	.9223 I.92I0	1.1272	2.1657	0.11285	0.53825	30
31	.46201	.83638	.52094	.9196	.1275	. 1645	.11312	.53799	29
32	.46226	.88674	.52131	.9182	.1277	.1633	.11326	53773	28
33	.46252	.83661	.52168	.9169	.1279	. 1620	.11339	.53748	27
34	.46278	.83647	.52205	.9155	.1281	.1608	.11353	.53722	26
35 36	0.46304	0.88634	0.52242	1.9142	1.1282	2.1596	0.11366	0.53696	25
36	.46330	.88620	.52279	.9128	.1284	. 1584	.11380	.53670	24
37 38	.46355	.88607	. 52316	.9115	.1286	.1572	.11393	.53645	23
39	.46381	.88393 .88580	.52353	.9101 .9088	.1287	. 1560	.11407	.53619 .53593	22 21
40	0.46433	0.88566	.52390	1.9074	1.1291	2.1536	0.11434	0.53567	20
41	.46458	.88553	.52464	.9061	.1293	.1525	.11447	.53541	19
42	.46484	.88539	.52501	.9047	.1294	.1513	.11461	.53516	18
43	.46510	.88526	.52538	.9034	.1296	.1501	.11474	.53490	17
44	.46536	.88512	. 52575	.9020	.1298	.1489	.11488	. 53464	16
45	0.46561	0.83499	0.52612	1.9007	1.1299	2.1477	0.11501	0.53438	15
46	.46587	.88485	. 52650	.8993	.1301	. 1465	.11515	-53413	14
47	.46613	.88472	. 52687	.8980	. 1303	.1453	.11528	-53387	13
48	.46639	.88458	.52724	.8967	. 1305	.1441	.11542	.53361	12 11
49 50	.46664 o.46690	.88444 0.88431	0.52761	.8953 1.8940	1.1308	.1430 2.1418	0.11555	.53336 0.53310	10
51	.46716	.88417	.52836	.8927	.1310	.1406	,11583	. 53284	
52	.46741	.83404	.52873	.8913	.1312	.1394	.11596	. 53258	8
53	.46767	.88395	.52910	.8900	.1313	.1382	.11610	.53233	9 8 7 6
54	.46793	.88376	.52947	.8887	.1315	.1371	.11623	. 53207	6
55	0.46819	0.88363	0.52984	1.8873	1.1317	2.1359	0.11637	0.53181	5
56	.46844	.88349	.53022	.8860	.1319	. 1347	.11651	. 53156	4
57 58	.46870	.88336	.53059	.8847	.1320	.1335	.11664	.53130	3 2
58	.46896	.88322	.53096	.8834	.1322	.1324	.11678	.53104	2 I
59 60	.46921 0.46947	.88308 0.88295	.53134 0.53171	.8820 1.8807	1.1324	.1312 2.1300	0.11705	.53078 0.53053	0
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

117°

28°

Natural Trigonometric Functions

151°

M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
. 0	0.46947	0.88295	0.53171	1.8807	1.1326	2.1300	0.11705	0.53053	60
I	. 46973	.88281	.53208	.8794	.1327	.1289	.11719	.53027	59 58
2	.46998	.88267	-53245	.8781	.1329	.1277	.11732	.53001	58
3	.47024	.88254	.53283	.8768	.1331	.1266	.11746	.52976	57
4 5 6	.47050	.88240	.53320	.8754	.1333	.1254	.11760	.52950	56
5	0.47075	0.88226	0.53358	1.8741	1.1334	2,1242	0.11774	0.52924	55
0	.47101	.88213	-53395	.8728	.1336	.1231	.11787	.52899	54
7 8	.47127	.88199 .88185	.53432	.8715 .8702	.1338	.1219	.11801	.52873	53
°	.47152 .47178	.88171	.53470	.8689	.1340	.1208 .1196	.11815	.52847	52
10	0.47204	0.88158	.53507 0.53545	1.8676	1.1341	2.1185	0.11842		51 50
11	.47229	.88144	.53582	.8663	.1345	.1173	.11856	0.52796	49
12	.47255	.88130	.53619	.8650	.1347	,1162	.11870	.52745	48
13	.47281	.88117	.53657	.8637	.1349	.1150	.11883	.52719	47
14	.47306	.88103	.53694	.8624	.1350	.1139	.11897	.52694	46
15	0.47332	0.88089	0.53732	1.8611	1.1352	2.1127	0.11911	0.52668	45
16	47357	.88075	.53769	.8598	.1354	.1116	.11925	.52642	44
17	.47383	.88061	.53307	.8585	.1356	.1104	.11938	.52617	43
18	47409	.88048	.53844	.8572	.1357	.1093	.11952	.52591	42
19	-47434	.88034	.53882	.8559	.1359	.1082	.11966	.52565	41
20	0.47460	0.88020	0.53919	1.8546	1.1361	2.1070	0.11980	0.52540	40
21	.47486	.88∞6	.53957	.8533	.1363	.1059	.11994	.52514	39
22	.47511	.87992	•53995	.8520	.1365	.1048	.12007	.52489	38
23	-47537	.87979	.54032	.8507	.1366	. 1036	.12021	.52463	37 36
24	.47562	.87965	.54070	.8495	.1368	.1025	.12035	.52437	36
25 26	0.47588	0.87951	0.54107	1.8482	1.1370	2.1014	0.12049	0.52412	35
26	.47613	.87937	.54145	.8469	.1372	.1002	.12063	.52386	34
27	.47639	87923	.54183	.8456	.1373	1000.	.12077	.52361	33
28	.47665	.87909	.54220	.8443	. 1375	.0980	.12090	.52335	32
29	.47690	.87895	.54258	.8430	.1377	.0969	.12104	.52310	31
30	0.47716	0.87832	0.54295	1.8418	1.1379	2.0957	0.12118	0.52284	30
31	.47741	.87868 .87854	.54333	.8405	.1381	.0946	.12132	.52258	29 28
32 33	.47707	.87840	.54371	.8379	.1384	.0935	.12146	.52233	
33	.47818	.87826	.54409 .54446	.8367	.1386	.0924	.12100	.52207 .52182	27 26
35	0.47844	0.87812	0.54484	1.8354	1.1388	2.0901	0.12174	0.52156	25
36	.47869	.87798	.54522	.8341	.1390	.0890	.12202	.52131	24
37	.47895	.87784	.54559	.8329	.1391	.0879	.12216	.52105	23
37 38	.47920	.87770	.54597	.8316	.1393	.0868	,12229	.52080	22
39	.47946	.87756	.54635	.8303	.1395	.0857	.12243	.52054	21
40	0.47971		0.54673	1.8291	1.1397	2.0846	0.12257	0.52029	20
41	.47997	.87728	.54711	.8278	.1399	.0835	.12271	.52003	19
42	.48022	.87715	.54748	.8265	.1401	.0824	.12285	.51978	18
43	.48048	.87701	.54786	.8253	.1402	.0812	.12299	.51952	17
44	.48073	.87687	.54824	.8240	.1404	.0801	.12313	.51927	16
45 46	0.48099	0.87673	0.54862	1.8227	1.1406	2.0790	0.12327	0.51901	15
	.48124	.87659	.549∞	.8215	.1408	.0779	.12341	.51876	14
47	.48150	.87645	•54937	.8202	.1410	.0768	.12355	.51850	13
48	.48175	.87631	-54975	.8190	.1411	.0757	.12369	.51825	12
49	.48201	.87617	.55013	.8177	.1413	.0746	.12383	.51799	II
50	0.48226	0.87603	0.55051	1.8165	1.1415	2.0735	0.12397	0.51774	10
51 52	.48252	.87588 .87574	.55089	.8152 .8140	.1417	.0725	.12411	.51748	9
53	.48303	.87560	.55127	.8140	.1421	.0714	.12425	.51723	0
54	.48328	.87546	.55203	.8115	.1421	.0692	.12453	.51672	7 6
55	0.48354	0.87532	0.55241	1.8102	1.1424	2,0681	0.12468	0.51646	5
55 56	.48379	.87518	.55279	.8090	.1426	.0670	.12482	.51621	4
57	.48405	.87504	.55317	.8078	.1428	.0659	.12496	.51595	3
58	.48430	.87490	.55355	.8065	.1430	.0648	.12510	.51570	2
59	.48455	.87476	•55393	.8053	.1432	.0637	.12524	.51544	ĩ
59 60	0.48481	0.87462	0.55431	1.8040	1.1433	2.0627	0.12538	0.51519	0
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

118°

29° Natural Trigonometric Functions

M Cosine Vrs. Sin. Vrs. Cos. Sine Tan. Cotan. Secant Cosec. 1.8040 0.48481 0.87462 2.0627 60 C 0.55431 I.1433 0.12538 0.51519 .51493 .51468 .48500 .8028 .0616 59 58 1 .87446 .55469 .1435 .12352 .48532 . 12566 2 .87434 .55507 .8016 .0605 .1437 .12530 .48557 .48583 .87420 .55545 8003 .0594 .51443 57 56 3 .1439 .87405 .55583 .7991 .0583 4 .1441 .12594 .51417 0.87391 0.55621 5 0.48608 1.7979 .7966 I.1443 2.0573 0.12600 0.51392 55 .48633 .87377 .55659 .12623 .51366 .1445 .0562 54 .48659 .87363 . 1446 .12637 7 .55697 .7954 .0551 .51341 53 .48684 .87349 .1448 .0540 .12651 .51316 ·55735 .7942 52 .48710 .87335 .12665 .51290 51 9 .55774 .7930 .1450 .0530 0.48735 0.12679 0.87320 0.55812 2.0519 ΙÓ 1.7917 1.1452 50 .7905 .7893 .7881 11 .48760 .87306 .55850 .0508 .12694 49 .1454 .51239 .48786 .87292 .55888 .0498 12 .1456 .12708 .51214 .48811 .87278 .55926 .51189 13 .1458 .12722 47 46 .7868 14 .48837 .87264 .55964 o.56003 .1459 .0476 .12736 .51163 0.48862 15 0.87250 1.7356 1.1461 2.0466 0.12750 0.51138 45 .56041 .7844 .1463 .51112 16 .48387 .87235 .0455 .12765 44 .48913 .87221 .56079 .7832 .1465 17 .0444 .12779 .51087 43 .48938 .56117 .7820 . 1467 18 .87207 .0434 .12793 .51062 42 .7808 .48964 19 .87193 .56156 .1462 .0423 .12807 .51036 41 0.12321 40 0.48989 0.87178 0.56194 1.7795 0.51011 20 1.1471 2.0413 .56232 .7783 .12836 .50986 39 38 21 .49014 .87164 .1473 .0402 .87150 .56270 .12850 .50960 22 .49040 .7771 .1474 .0392 .49065 .87136 .12864 23 .56309 .1476 .0381 .50935 37 36 .7759 87121 .56347 o.56385 24 .49090 .7747 .1473 .0370 .12879 .50910 0.87107 0.50884 25 0.49116 1.1480 0.12893 35 1.7735 2.0360 26 .49141 .87093 .56424 .7723 .1482 .0349 .12907 .50850 34 33 .7711 .7629 .7637 .87078 .56462 27 1484 .50834 .49166 .0339 .12921 .1486 28 .49192 .87064 .56500 .50808 .12936 32 .0329 .49217 .56539 ,1488 29 .87050 .0318 .12950 .50783 31 0.56577 .56616 0.87035 1.7675 1.1489 2.0308 0.50758 30 0.49242 0.12964 30 .7663 31 .49268 .87021 .1491 .0237 .12979 .50732 29 28 .87007 32 .49293 .56654 .7651 .1423 .12993 .50707 .49318 .86992 .56692 .7639 .0276 .50682 33 .13007 27 .1425 .86978 o.86964 .56731 .7627 .0266 .50656 26 34 .49343 .1427 .13022 0.49369 0.56769 1.7615 2.0256 0.50631 35 36 1.1429 0.13036 25 .56308 .7603 .50606 .49394 .86949 .1501 .0245 .13050 24 37 38 .86935 .56346 .49419 .759I .1503 .0235 .13065 .50580 23 .49445 .86921 .56885 .7579 .1505 .0224 .13079 .50555 22 56923 .7567 . 13094 39 .49470 .86906 .1507 .0214 .50530 21 0.86892 0.56962 0.50505 40 0.49495 I.7555 1.1508 2.0204 0.13108 20 .86877 .86863 .0194 19 41 .49521 .57000 .7544 .1510 .13122 .50479 42 .49546 .13137 .50454 .57039 .7532 .1512 .86849 43 .4957I .0173 .50429 17 .57077 .7520 .1514 .13151 .86834 .7508 .57116 .1516 .0163 44 .49596 .13166 .50404 16 0.86820 0.49622 0.57155 1.7496 1.1518 2.0152 0.13180 0.50378 15 46 .49647 .86805 .7484 .0142 .50353 14 .57193 .1520 .13194 47 48 .86791 .49672 .57232 -7473 .1522 .0132 .13200 .50328 13 .86776 .49697 .57270 .7461 .1524 .0122 .13223 .50303 12 .57309 0.57348 .86762 .1526 . 13238 49 .49723 .7449 IIIO. .50277 11 0.86748 1.7437 .7426 1.1528 0.50252 50 0.49748 2,0101 0.13252 10 .86733 1000. .13267 .50227 51 .57386 .1530 98 .49773 52 .49798 .86719 .1531 .13281 .50202 .57425 .7414 .86704 .50176 53 .57464 .7402 .0071 .13296 76 .49849 .86690 . 57502 .1535 1.1537 54 .7390 .∞51 .13310 .50151 0.86675 55 56 0.49874 0.57541 1.7379 2.0050 0.13325 0.50126 5 57580 .50101 .86661 .49899 .7367 .1522 .0010 .13339 4 57 58 .86646 .57619 .49924 -7355 .1541 .0030 .I3354 .50076 3 .86632 .57657 .0020 .49950 .7344 .1543 .13363 .50050 2 .86617 .57626 59 60 .7332 .13333 .50025 .49975 .1545 .coro I 0.50000 0.86603 0.57735 1.7320 1.1547 2,0000 0.13307 0.50000 0 M M Cosine Sine Cotan. Tan. Cosec. Vrs. Cos. Vrs. Sin

119°

\$0° Natural Trigonometric Functions

149°

					ometric i				
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.50000	0.86603	0.57735	1.7320	1.1547	2,0000	0.13397	0.50000	60
1	.50025	.86588	-57774	.7309	.1549	1.9990	.13412	-49975	59 58
2	.5∞50	.86573	.57813	.7297	.1551	.9980	.13426	.49950	58
3	.50075	.86559	-57851	.7286	.1553	.9970	.13441	.49924	57
4	.50101	.86544	.57890		.1555	.9960	.13456	.49899	56
5	0.50126	0.86530	0.57929	1.7262	1.1557	1.9950	0.13470	0.49874	55
7	.50151	.865∞	.57968 .58007	.7251	.1559 .1561	.9940	.13485	.49849	54 53
7 8	.50201	.86486	58046		.1562	.9920	.13514	49799	52
9	.50226	.86471	.58085		1564	.9910	13529	.49773	51
10	0.50252	0.86457	0.58123		1.1566	1.9900	0.13543	0.49748	50
111	.50277	.86442	.58162	.7193	.1568	.9890	.13558	-49723	49
12	.50302	.86427	.58201		.1570	.9880	·I3572	.49698	48
13	.50327	.86413	.58240		.1572	.9870	.13587	.49673	47
14	.50352	.86398	.58279		.1574	.9860	.13602	.49648	46
15	0.50377	0.86383 .86369	0.58318 .58357	1.7147	1.1576	1.9850	0.13616	0.49623 -49597	45 44
17	.50428	.86354	58396	.7124	.1580	.9830	13646	.49572	43
18	.50453	.86339	.58435	.7113	.1582	.9820	13660	.49547	43
19	.50478	.86325	.58474	.7101	.1584	1180.	.13675	.49522	41
20	0.50503	0.86310	0.58513		1.1586	1.9801	0.13690	0.49497	40
21	.50528	.86295	.58552	.7079	.1588	.9791	.13704	.49472	39
22	.50553	.86281	.58591	.7067	.1590	.9781	.13719	-49447	38
23	.50578	.86266	.58630	.7056	.1592	.9771	.13734	.49422	37
24	0.50628	.86251 0.86237	.58670 0.58709	.7044 1.7033	1.1594 1.1596	.9761 1.9752	.13749 0.13763	49397	36 35
26	.50653	.86222	.58748	.7022	.1598	.9742	.13778	.49346	34
27	.50679	.86207	.58787	.7010	.1600	.9732	13793	.49321	33
28	.50704	.86192	.58826	.6999	.1602	.9722	.13807	.49296	32
29	.50729	.86178	.58865	.6988	.1604	.9713	.13822	.49271	31
30	0.50754	0.86163	0.58904	1.6977	1.1606	1.9703	0.13837	0.49246	30
31	.50779	.86148	.58944	.6965	.1608	.9693	.13852	.49221	29
32	.50804	.86133 .86118	.58983	.6954	.1610	.9683	.13867 .13881	.49196	28
34	.50854	.86104	.59022 .59061	.6943 .6931	.1614	.9674	.13896	.49171	27 26
35	0.50879	0.86089	0.59100	1.6920	1.1616	1.9654	0.13911	0.49121	25
35 36	.50904	.86074	.59140	.6909	.1618	.9645	.13926	.49096	24
37	.50929	.86059	.59179	.6898	.1620	.9635	.13941	.49071	23
38	.50954	.86044	.59218	.6887	.1622	.9625	.13955	.49046	22
39	.50979	.86030	.59258	.6875	.1624	.9616	.13970	.49021	21
40 41	0.51004	0.86015	0.59297	1.6864	1.1626	1.9606	0.13985	0.48996	20
42	.51029	.86000 .85985	.59336	.6853 .6842	.1628	.9596 .9587	.1400	.48971 .48946	19 18
43	.51054	.85970	.59376 .59415	.6831	.1632	.9507	.14013	.48941	17
44	.51104	.85955	-59454	.6820	.1634	.9568	.14044	.48896	16
45	0.51129	0.85941	0.59494	1.6808	1.1636	1.9558	0.14059	0.48871	15
46	.51154	.85926	-59533	.6797	.1638	.9549	.14074	.48846	14
47 48	.51179	.85911	-59572	.6786	.1640	• 9 539	.14089	.48821	13
45	.51204	.85896	.59612	.6775	.1642	.9530	.14104	.48796	12
49 50	.51229 0.51254	.85881 0.85866	.59651	.6764	. 1644 1.1646	.9520	0.14119	.48771 0.48746	11
51	.51279	.85851	0.59691 .59730	1.6753 .6742	.1648	.9510	.14149	.48721	
52	51304	.85836	.59770	.6731	.1650	.9491	.14164	.48696	9
53	.51329	.85821	.59809	.6720	.1652	.9482	.14178	.48671	7 6
54	.51354	.85806	.59849	.6709	.1654	.9473	.14193	.48646	
55 56	0.51379	0.85791	0.59888	1.6698	1.1656	I.9463	0.14208	0.48621	5
50	.51404	.85777	.59928	.6687	.1658	.9454	.14223	.48596	4
57 58	.51429	.85762	.59967	.6676 .6665	.1660 .1662	-9444	.14238	.48571	3 2
50	.51454	.85747 .85732	.60046	.6654	.1664	.9435 .9425	.14253	.48521	il
59 60	0.51504	0.85717	0.60086	1.6643	1.1666	1.9416	0.14283	0.48496	6
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.		M
				- 1		1.			

120° 59°

81°

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.51504	0.85717	0.60086	1.6643	1.1666	1.9416	0,14283	0.48496	60
I	.51529	.85702	.60126		.1668	.9407	.14298	.48471	59
2	.51554	.85687	.60165	.6621	.1670	-9397	.14313	.48446	58
3	.51578	.85672	.60205	.6610	.1672	.9388	.14328	.48421	57
4	.51603	.85657	.60244	.6599	.1674	.9378	.14343	.48396	56
5 6	0.51628	0.85642	0.60284		1.1676	1.9369	0.14358	0.48371	55
6	.51653	.85627	.60324		.1678	.9360	.14373	.48347	54
7 8	.51678	.85612	.60363	.6566	.1681	.9350	.14388	.48322	53
	.51703	.85597	.60403	.6555	.1683	.9341	.14403	.48297	52
9	.51728	.85582	.60443	.6544	.1685	.9332	.14418	.48272	51
10	0.51753	0.85566	0.60483	1.6534	1.1687	1.9322	0.14433	0.48247	50
11	.51778	.8555t	.60522	.6523	.1689	.9313	.14448	.48222	49
12	.51803	.85536	.60562	.6512	.1691	.9304	.14463	.48197	48
13 14	.51827	.85521 .85506	.60642	.6501 .6490	.1693	.9295	.14479	.48172 .48147	47 46
15	0.51877	0.85491	0.60681	1.6479	1.1697	.9285 1.9276	.14494 0.14509	0.48123	45
16	.51902	.85476	.60721	.6469	.1699	.9267	.14524	.48098	43
17	.51927	.85461	.60761	.6458	.1701	.9258	.14539	.48073	43
18	.51952	.85446	.60801	.6447	.1703	.9248	.14554	.48048	42
19	.51977	.85431	.60841	,6436	.1705	.9239	.14569	.48023	41
20	0.52002	0.85416	0.60881	1.6425	1.1707	1.9230	0.14584	0.47998	40
21	.52026	.85400	.60920	.6415	.1709	.9221	.14599	.47973	39
22	.52051	.85385	.60960	.6404	.1712	.9212	.14615	.47949	39 38
23	.52076	.85370	.61000	.6393	.1714	.9203	.14630	.47924	37
2.1	.52101	.85355	.61040	.6383	.1716	.9193	.14645	.47899	36-
25 26	0.52126	0.85340	0.61080	1.6372	1.1718	1.9184	0.14660	0.47874	35
	.52151	.85325	.61120	.6361	.1720	.9175	.14675	.47849	34
27	.52175	.85309	.61160	.6350	.1722	.9166	.14690	.47824	33
28	.52200	.85294	.61200	.6340	.1724	.9157	.14706	.47800	32
29	.52225	.85279	.61240	.6329	.1726	.9148	.14721	-47775	31
30	0.52250	0.85264	0.61280	1.6318	1.1728	1.9139	0.14736	0.47750	30
31	.52275	.85249	.61320	.6308	.1730	.9130	-14751	-47725	29
32	.52299	.85234	.61360	.6297	.1732	.9121	.14766	.47700	28
33	.52324	.85218	.61400	.6286 .6276	.1734	.9112	.14782	.47676	27 26
34	.52349	.85203 0.85183	0.61440	1,6265	.1737	.9102	.14797 0.14812	0.47626	
35 36	.52374	.85173	.61520	.6255	1.1739	1.9093	.14827	.47601	25 24
37	.52423	.85157	.61560	.6244	.1743	.9075	.14842	.47577	23
38	.52423	.85142	.61601	.6233	.1745	.9066	.14858	.47552	22
39	.52473	.85127	.61641	.6223	.1747	.9057	.14873	.47527	21
140	0.52498	0.85112	0.61681	1.6212	1.1749	1.9018	0.14888	0.47502	20
4T	.52522	.85096	.61721	.6202	.1751	.9039	.14904	.47477	19
42	.52547	.85081	.61761	.6191	.1753	.9030	.14919	.47453	18
43	.52572	.85066	.61801	.6181	.1756	.9021	.14934	.47428	17
44	.52597	.85050	.61842	.6170	.1758	.9013	.14949	.47403	16
45 46	0.52621	0.85035	0.61882	1.6160	1.1760	1.9004	0.14965	0.47379	15
46	.52646	.85020	.61922	.6149	.1762	.8995	.14980	.47354	14
47	.52671	.85004	.61962	.6139	.1764	.8986	.14995	.47329	13
48	.52695	.81989	.62∞3	.6128	.1766	.8977	.15011	.17301	12
49	.52720	.84974	.62043	.6118	.1768	.8968	.15026	.47280	11
50	0.52745	0.84959	0.62083	1.6107	1.1770	1.8959	0.15041	0.47255	10
51 52	.52770	.84943	.62123	.6086	.1772	.8950	.15057	.47230	9
53	.52794	.84912	.62204	.6076	.1775	.8932	.15072	.47205	°,
54	.52844	.84897	.62214	.6066	.1779	.8924	.15103	.47156	7
54	0.52868	0.84882	0.62285	1.6055	1.1781	1.8915	0.15118	0.47131	
55 56	.52893	.84866	.62325	.6045	.1783	.8906	.15133	.47107	4
57	.52918	84851	62366	.6034	.1785	.8897	.15149	47082	5 4 3
58	.52942	.84836	.62406	.6024	.1787	.8883	.15164	.47057	2
59 60	.52967	.84820	.62446	.6014	.1790	.8879	.15180	.47033	1
60	0.52992	0.84805	0.62487	1.6003	1.1792	1.8871	0.15195	0.47008	۰
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M

121°

М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos	М
-	0.52992	0.84805	0.62487	1.6003	1.1792	1.8871	0.15195	0.47008	60
1	.53016	.84789	.62527	.5993	.1794	.8862	.15211	.46983	59 58
2	.53041	.84774	.62568	.5983	1796	.8853	.15226	.46959	58
3	. 53066	.84758	.62608	.5972	. 1798	.8844	. 15241	.46934	57
5 6	.53090	.84743	.62649	. 5962	.1800	.8836	.15257	. 46909	56
5	0.53115	0.84728	0.62639	1.5952	1.1802	1.8827	0.15272	0.46885	55
0	.53140	.84712	.62730	.5941	. 1805	8188.	. 15288	.46860 .46835	54 53
7 8	13161 (8183.	.84697 .84631	62770	.5931	.1807	1088.	. 15303	.46811	53 52
ا ۋا		.84666	.62851	.5921	1181.	.8792	.15334	.46786	51
10	0.53211	0.84650	0.62892	1.5900	1.1813	1.8783	0.15350	0.46762	50
111	.53263	.84635	.62933	.5890	.1815	.8775	.15365	.46737	49
12	.53233	.84619	.62973	.5880	.1818	.8766	.15381	.46712	49 48
13	.53312	.84601	.63014	.5869	. 1820	.8757	. 15396	.46688	47
14	-53337	.84588	.63055	. 5859	.1822	.8719	.15412	.46663	46
15	0.53361	0.84573	0.63095	1.5849	1.1824	1.8740	0.15427	0.46638	45
16	. 53336	.84557	.63136	.5839	.1826	.8731	. 15443	.46614	44
17	.53411	.84542	.63177	.5829	.1828	.8723	.15458	.46589	43
18	-53435	.84526	.63217	.5818	.1831	.8714	.15474	.46565	42
19	. 53460	.84511	.63258	.5808	.1833	.8706	.15489	.46540	4I 40
20	0.53484	0.84495	0.63299	1.5798	1.1835	1.8697 .8688	0.15505	0.46516 .46491	39
2I 22	.53509	.84464	.63339 .63380	.5778	.1839	.8680	.15536	.46466	38
23	.53533 .53558	.84448	.63421	.5768	.1841	.8671	.15552	.46442	37
24	.53583	.84433	.63462	.5757	.1844	.8663	.15567	.46417	36
25	0.53607	0.84417	0.63503	1.5747	1.1846	1.8654	0.15583	c.46393	35
26	.53632	.84402	.63543	.5737	.1848	.8646	.15598	.46368	34
27	.53656	.84386	.63584	.5727	.1850	.86,37	.15614	. 46344	33
28	.53681	.84370	.63625	.5717	.1852	.8629	.15630	.46319	32
29	. 53705	.84355	.63666	.5707	.1855	.8620	.15645	.46294	31
30	0.53730	0.84339	0.63707	1.5697	1.1857	1.8611	0.15661	0.46270	30
31	.53754	.84323	.63748	. 5687	.1859	.8603	.15676	.46245	29 28
32	-53779 -53803	.84308 .84292	.63789 .63830	.5677 .566 7	.1861	.8595 .8586	.15692	.46221 .46196	20
33	.53803	.84292	.63871	.5657	1866	.8578	.15723	.46172	26
34	.53823 0.53352	0.84261	0.63912	1.5646	. 1866 1.1868	1.8569	0.15739	0.46147	25
35 36	.53877	.84245	.63953	.5636	.1870	.8561	.15755	.46123	24
37	.53901	.84229	.63994	.5626	.1872	.8552	.15770	.46098	23
38	.53926	.84214	.64035	.5616	.1874	.8544	.15786	.46074	22
39	.53950	.84193	.64076	.5606	1 .1877	.8535	.15802	.46049	21
40	0.53975	0.84182	0.64117	1.5596	1.1879	1.8527	0.15817	0.46025	20
41	-53999	.84167	.64158	. 5586	. 1881	.8519	.15833	.46000	19
42	. 54024	.84151	.64199	-5577	. 1883	.8510	.15849	.45976	18
43	.54048	.84135	.64240		. 1886	.8502	.15865	.45951	17 16
44	.54073	.84120 0.84104	.64281 0.64322	-5557	1.1883	.8493 1.8485	0.15880	0.45927	15
45 46	0.54097	.84088	.64363	1.5547 .5537	.1892	.8477	.15912	.45878	14
47	.54122 .54146	.84072	.64404	.5527	.1894	.8468	.15927	.45854	13
48	.54171	.84072	.64446	.5517	.1897	.8460	.15943	.45829	12
49	.54195	.84041	.64487	.5507	.1899	.8452	.15959	.45805	11
50	0.54220	0.84025	0.64528	1.5497	1.1901	1.8443	0.15975	0.45780	10
51	.54244	.84009	.64569	.5487	.1903	.8435	10021.	.45756	9 8
52	.54268	.83993	.64610	.5477	.1906	.8427	.16006	.45731	8
53	.54293	.83978	.64652	.5467	.1908	.8418	.16022	.45707	7 6
54	.54317	.83962	.64693	.5458	. 1910	.8410	. 16038	.45682	
55 56	0.54312	0.83916	0.64734	1.5448	1.1912	1.8402	0.16054	0.45658 .45634	5 4
50	.54366	.83930	.64775 .64817	.5438	.1915	.8394 .8385	. 16070	.45609	3
57 58	.54391 .54415	.83899	.64858	.5426	.1917	.8377	.16101	.45585	2
59	.54439	.83883	.64899		.1921	.8369	.16117	45560	ī
60	0.54464	0.83867	0.64941	1.5399	1.1922	1.8361	0.16133	0.45536	0
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	7
0	0.54464	0.83867	0.64941	1.5399	1.1924	1.8351	0.16133	0.45536	6
ī	. 54458	.83851	.64982	-5389	.1926	.8352	.16149	.45512	5
2		.83535	.65023	.5359	.1928	.8344	.16165	-45487	5
	-54513			-5379			.16150		
3	-54537	.83819	.65065	. 5369	.1930	.8336		. 45.463	5
4	.54561	.83504	.65106	-5359	.1933	.8328	. 16196	.45438	5
5	0.54586	a.8378\$	0.65148	1.5350	1.1935	1.8320	0 15212	0.45414	5
6	.54610	.83772	.65189	.5340	. 1937	.8311	.16228	.45390	5
7	.54634	.83756	.65231	.5330	.1939	.8303	16244	-45365	5
8	-54659	.83740	.65272	-5320	.1942	. 8295	.15250	.45341	5
9	.54683	.83724	.65314	.5311	.1944	.8287	.16276	-45317	5
10	0.54708	0.83708	0.65355	1.5301	1.1946	1.8279	0.16292	0.45292	5
II	-54732	.83692	.65397	.5291	.1948	.8271	.16308	45258	4
12			.03397	-5291		.8263	.16323		
	.54756	.83676	.65438		. 1951	-0203		-45244	4
13	.54781	.83660	.65480	.5272	.1953	.8255	.16339	.45219	4
14	. 54805	.83644	.65521	.5262	. 1955	.8246	. 16355	-45195	4
15	0.54829	0.83629	0.65563	1.5252	1.1958	1.8238	0.16371	0.45171	4
16	. 54854	.83613	.65604	.5243	.1950	.8230	.15387	.45146	4
17	.54878	.83597	.65646	.5233	.1062	.8222	.16403	.45122	4
īŠ	.54902	.83581	.65688	.5223	.1054	.8214	.16419	.45008	4
19	.54926	.83565	65000		.1967	.8206	.16435	.45073	4
20		.03303	.65729	.3214			0.16451		
	0.54951	0.83549	0.65771	1.5204	1.1959	1.8108	0.10451	0.45049	4
21	. 54975	.83533	.65813	-5195	-1971	.8190	.16467	.45025	3
22	.54999	.83517	.65854	.5185	.1974	.8182	.16483	.45000	3
23	.55024	.83501	.65896	.5175	.1976	.8174	. 16499	.44075	3
24	. 55048	.83485	.65938	.5166	.1978	.8166	.16515	-44952	3
25	0.55072	0.83469	0.65980	1.5155	1.1985	1.8158	0.16531	0.44928	3
26	-55097	.83453	.66021	-5147	.1083	.8150	.16547	.44903	3
27		.83437	.66063		.1085	.5142	. 16563	.44879	3
	.55121			.5137			.10503		2
28	-55145	.83421	.66105	.5127	.1987	.8134	.16579	-44855	3
29	.55169	.83405	.66147	.5118	.1990	.8125	. 16595	.44530	3
30	0.55194	0.83388	0.66188	1.5108	1.1992	1.8118	0.16611	0.44806	3
31	.55218	. 83372	.66230	. 5000	.1994	.8110	. 16627	.44782	2
32	. 55242	.83356	.66272	.5089	.1997	.8102	.16643	.44758	2
33	.55266	.83340	.66314	.5080	.1000	.8004	.16660	-44733	2
34	.55291	.83324	.66356	.5070	.2001	.8085	.16676	.44709	2
			0.66398	.50,0		1.8078	0.16692		
35	0.55315	0.83308		1.5061	1.2004			0.44685	2
36	- 55339	.83292	.65440	.5051	. 2006	.8070	.16708	.44661	2
37	- 55363	.83276	.66482	.5042	. 2008	.8062	.16724	- 44637	2
38	.55388	.83260	.65524	.5032	.2010	.8054	. 16740	.44612	2
39	-55412	.83244	.66566	.5023	.2013	.8047	. 16755	-44588	2
40	0.55436	0.83228	0.66608	1.5013	1.2015	1.8039	0.16772	0.44564	2
41	.55460	.83211	.66650	.5004	.2017	.8031	.16788	.44540	1
42	.55484	.83195	.65692	.4994	.2020	.8023	.16804	-44515	1
43			.66734	. 2994		.8015	.16821		I
	. 55559	.83179		.4985	. 2022			.44401	I
44	· 55533	.83163	.66776	. 4975	. 2024	.8007	. 16837	.4445;	
45	0.55557	0.83147	0.66818	1.4966	1.2027	1.7000	0.16853	0.44443	1
46	.55581	.83131	.66860	- 4957	. 2029	.7002	. 16860	.44419	I.
47	. 53605	.83115	.66902	4947	.2031	.70\$4	. 16885	- 44395	I
47 48	.55629	.83098	.66944	.4935	.2034	. 7976	.16901	-44370	1
49	. 55654	.83082	.66986	.4928	. 2036	7058	.16918	.44346	1
50	0.55678	0.83066	0.67028	1.4919	I 2039	1.7060	0.16934	0.44322	10
51	-55702	. 83050	.67071	.4910	.2041	7053	.16950	.44325	- 4
						. 7953	*E-EF		1
52	.55726	.83034	.67113	. 4900	. 2043	.7945	. 16966	.442,4	
53	.5575⊃	.83017	.67155	.4801	. 2046	-7937	. 16082	.44250	3
54	-55774	.83001	.67197	4881	. 2045	7020	. 16000	.44225	6
55	0.55799	0.82985	0 67239	1.4872	1.2050	1 7021	0.17015	0.44201	3
56	.55\$23	.82060	.67282	. 4863	. 2053	7014	.17031	.44177	- 4
57	,55847	.82952	.67324	. 4853	.2055	. 7005	.17047	-44153	3
58	.55871	.82935	.67366	.4844	.2057	7808	17054	44129	
50 59	.55895	.82930	67.100	. 4535	.2000	7801	.17080	. 44105	- 1
59 60			.67408						
·	0.55919	0.82904	0.67451	1.4526	1.2062	1.7883	0.17096	0.44081	- 5

	М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
1	•	0.55919	0,82904	0.67451	1.4826	1.2062	1.7883	0.17096	0.44081	60
1	ĭ	.55943	.82887	.67493	.4816	.2064	.7875	.17112	.44057	59
1	2	.55967	.82871	.67535	.4807	.2067	.7867	.17129	.44032	58
1	3	.55992	.82855	.67578	.4798	.2069	.7860	.17145	.44008	57
1	4	.56016	.82839	.67620	.4788	.2072	.7852	.17161	. 43984	56
1	5	0.56040	0.82822	0.67663	1.4779	1.2074	1.7844	0.17178	0.43960	55
1	5	.56064	.82806	.67705	.4770	.2076	.7837	.17194	. 43936	54
1	7 8	.56088	.82790	.67747	.4761	.2079	.7829	.17210	.43912	53
1	8	.56112	.82773	.67790	.4751	.2081	7821	.17227	.43888	52
-1	9	.56136	.82757	.67832	.4742	.2083	.7814	.17243	.43864	51
١	10	0.56160	0.82741	0.67875	1.4733	1.2086	1.7806	0.17259	0.43840	50
-	II	.56184	.82724	.67917	.4724	.2088	.7798	.17276	.43816	49
-1	12	.56208	.82708	.67960	.4714	.2091	.7791	.17292	43792	48
1	13	.56232	.82692	.68002	4705	.2093	.7783	.17308	.43768	47
-	14	.56256	.82675	.68045	.4696	.2095	.7776	. 17325	-43743	46
[15	0.56280	0.82659	0.68087	1.4687 .4678	1.2098	1.7768	0.17341	0.43719 .43695	45 44
-	16	.56304	.82643		.4669	.2100	.7760	.17357	.43671	43
1	17 18	.56328	.82626 .82610	.68173	.4659	.2103	.7753 .7745	.17374	.43647	43 42
١	19	.56353	.82593	.68258	.4650	.2103	.7738	.17406	.43623	41
ı	20	0.56401		0.68301	1.4641	1.2110	1.7730	0.17423	0.43599	40
-	21	.56425	.82561	.68343	.4632	,2112	.7723	.17439	·43575	39
1	22	.56449	.82544	.68386	.4623	,2115	.7715	.17456	.43551	38
	23	.56473	.82528	.68429	.4614	,2117	.7708	.17472	43527	37
	24	.56497	.82511	.68471	.4605	.2119	.7700	.17489	.43503	36
-	25	0.56521		0.68514	1.4595	1.2122	1.7693	0.17505	0.43479	35
- [26	.56545	.82478	.68557	.4586	.2124	.7685	.17521	.43455	34
-1	27	.56569	.82462	.68600	.4577	.2127	.7678	.17538	.43431	33
- 1	28	.56593	.82445	.68642	.4568	.2129	.7670	.17554	.43407	32
-{	29	.56617	.82429	.68685	. 4559	.2132	.7663	.17571	.43383	31
-	30	0.56641		0.68728	1.4550	1.2134	1.7655	0.17587	0.43359	30
١	31	.56664	.82396	.68771	.4541	.2136	.7648	.17604	·43335	29
-	32	.56688	.82380	.68814	.4532	.2139	.7640	.17620	.43311	28
- 1	33	.56712	.82363	.68857	.4523	.2141	.7633	.17637	.43287	27 26
1	34	.567.36	.82347	.68899	.4514	.2144	.7625	.17653	.43263	
	35 36	0.56760		0.68942	1.4505	1.2146	1.7618	0.17670	0.43239 .43216	25 24
	30	.56784 .56808	.82314	.68985	.4496	.2149	.7603	.17703	.43210	23
	37 38	.56832	.82297 .82280	.69023	.4487 .4478	.2151	.7596	.17719	.43192	22
	39	.56856	.82264	.69114	.4469	.2156	.7588	.17736	.43144	21
	40	0.56880		0.69157	1.4460	1.2158	1.7581	0.17752	0.43120	20
	41	.56904	.82231	.69200	.4451	.2161	-7573	.17769	.43096	19
-	42	.56928	.82214	.69243	.4442	.2163	.7566	.17786	.43072	18
-	43	.56952	.82198	.69286	-4433	2166	.7559	.17802	.43048	17
ł	44	.56976	.82181	.69329	.4424	.2168	.7551	.17819	.43024	16
ı	45	0.57000	0.82165	0.69372	1.4415	1.2171	1.7544	0.17835	0.43000	15
- (46	.57023	.82148	.69415	.4406	.2173	.7537	.17852	.42976	14
- 1	47	.57047	.82131	.69459	•4397	.2175	.7529	.17868	.42952	13
ı	48	.57071	.82115	.69502	. 4388	.2178	.7522	.17885	.42929	12
	49	.57095	.82098	.69545	.4379	.2180	.7514	.17902	.42905	II
-	50	0.57119	0.82082	0.69588	1.4370	1.2183	1.7507	0.17918	0.42881	10
1	51	.57143	.82065	.69631	.4361	.2185	.7500	.17935	.42857	9
1	52	.57167	.82048 .82032	.69674	.4352	.2188	.7493	.17951	.42833	2
-	53	.57191	.82032	.69718	-4343	.2190	.7485 .7478	.17985	.42785	7
١	54	.57214		0.69804	.4335 1.4326	1.2195	1.7471	0.18001	0,42761	5
	55 56	.57262	.81982	.69847	.4317	.2198	.7463	.18018	.42738	4
	57	.57286	.81965	.69891	.4308	.2200	.7456	. 18035	.42714	3
ļ	58	.57310		.69934	.4299	.2203	7449	.18051	.42690	3 2
-	59	.57334	.81932	.69977	.4290	.2205	.7442	. 18068	42666	1
ı	59 60	0.57358		0.70021	1.4281	1.2208	1.7434	0.18085	0.42642	0
	м	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М
J										

35°

MATHEMATICAL TABLES										
		Natural	Trigono	metric F	unctions			144		
Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М		
0.57358		0.70021	1.4281	1.2208	1.7434	0.18085	0.42642	60		
.57381	86818.		.4273	.2210	.7427	10181.	.42618	59		
.57405	.81882	.70107	.4264	.2213	.7420	18118	-42595	53		
.57429	.81865	.70151	.4255	.2215	.7413	.18135	.42571	57 56		
·57453	.81848	.70194	.4246	.2218	.7405	.18151	.42547	56		
0.57477	0.81832	0.70238	1.4237	1.2220	1.7398	0.18168	0.42523	55		
.575∞	.81815	.70281	.4228	.2223	.7391	.18185	.42499	54		
-57524	.81798	.70325	.4220	.2225	.7384	.18202	.42476	53		
.57548	.81781	.70368	.4211	.2228	.7377	.18218	.42452	52		
.57572	.81765	.70412	.4202	.2230	.7369	. 18235	.42428	51		
0.57596	0.81748	0.70455	1.4193	1.2233	1.7362	0.18252	0.42404	50		
.57619	.81731	.70499	.4185	.2235	.7355	.18269	.42380	49		
.57643	.81714	.70512	.4176	.2238	.7348	. 18285	.42357	48		
.57667	.81698	.70586	.4167	.2240	.7341	.18302	42333	47		
.57691	.81681	.70629	.4158	.2243	-7334	.18319	.42309	46		
0.57714	0.81664	0.70673	1.4150	1.2215	1.7327	0.18336	0.42285	- 45		
.57738	.81647	.70717	.4141	.2248	.7319	.18353	.42262	44		
.57762	.81630	.70760	.4132	.2250	.7312	.18369	. 42238	43		
.57786	.81614	.70804	.4123	.2253	.7305	. 18386	.42214	42		
. 57809	.81597	.70848	.4115	.2255	.7298	. 18403	.42190	41		
0.57833	0.81580	0.70891	1.4106	1.2258	1.7291	0.18420	0.42167	40		
.57857	.81563	.70935	.4097	.2260	.7284	.18437	.42143	39 38		
.57881	.81546	.70979	.4089	.2263	.7277	.18453	. 42119	38		
.57904	.81530	.71022	.4080	.2265	.7270	.18470	.42096	37 36		
.57928	.81513	.71066	.4071	.2268	.7263	. 18487	.42072	30		
0.57952	0.81496	0.71110	1.4063	1.2270	1.7256	0.18504	0.42048	35		
-57975	.81479	.71154	.4054	.2273	.7249	.18521	.42024	34		
-57999	.81462	.71198	.4045	.2276	.7242	.18538	.42001	33		
. 58023	.81445	.71241	.4037	.2278	-7234	. 18555	.41977	32		
.58047	.81428	.71285	.4028	.2281	.7227	.18571	.41953	31		
0.58070		0.71329	1.4019	1.2283	1.7220	0.18588	0.41930	30 29		
.58091	.81395	.71373	.4011	.2286	.7213	. 18605 . 18622	.41906	28		
.58118	.81378	.71417	.4002	.2288	.7206			27		
.58141	.81361	.71461	-3994	.2291	.7199	.18639	.41859	26		
.58165	.81344	.71505	.3985	.2293	.7192		.41835			
0.58189	0.81327	0.71549	1.3976	1.2296	1.7185	0.18673	.41788	25 24		
.58212	.81310	.71593	.3968	,2298	.7178	.18690		23		
.58236	.81293	.71637	-3959	.2301	.7171	.18707	.41764	23		
.58259	.81276		:3951	.2301	.7164	.18724	.41740	21		
.58283	.81259 0.81242	0.71725	.3942	.2,306	-7157	. 18741	0.41717	20		
0.58307			1.3933	1.2309	1.7151	0.18758	.41669	19		
.58330	.81225	71813	.3925	.2311	.7144	.18775	.41646	18		
-58354	.81208	71857	.3916	.2314	.7137	.18792		17		
.58378	.81191	.71901	.3908	.2316	.7130	.18826	.41622	16		
.58401	.81174	.71945	.3899	.2319	.7123	0.18843	.41599	15		
0.58425	0.81157	72034	1.3891 .3882	1.2322	1.7116	18860	0.41575	15		
.58448		72078	3874	.2324	.7109	18877	41551	14		

 									
	0.57358	0.81915	0.70021	1.4281	1.2208	1.7434	0.18085	0.42642	60
1	.57381	86818.	.70064	.4273	.2210	.7427	10181.	. 42618	59
2	.57405	.81882	.70107	.4264	.2213	.7420	.18118	-42595	53
3	.57429	.81865	.70151	.4255	.2215	.7413	.18135	.42571	57
4 5 6	• 5745 3	.81848	.70194	.4246	.2218	.7405	.18151	.42547	56
5	0.57477	0.81832 .81815	.70238	1.4237	1.2220	1.7398	0.18168	0.42523	55
- 0	.575∞ .57524	.81798	.70325	.4228	.2223	.7391 .7384	.18185	.42499	54 53
7 8	.57548	.81781	.70368	.4211	.2228	.7377	.18218	.42452	52
9	.57572	.81765	.70412	.4202	.2230	.7369	. 18235	.42428	51
10	0.57596	0.81748	0.70455	1.4193	1.2233	1.7362	0.18252	0.42404	50
111	.57619	.81731	.70499	.4185	.2235	.7355	.18269	.42380	49
12	.57643	.81714	.70512	.4176	.2238	.7348	. 18285	.42357	48
13	.57667	.81698	.70586	.4167	.2240	.7341	.18302	-42333	47
14	.57691	.81681	.70629	.4158	.2243	-7334	. 18319	.42309	46
15 16	0.57714	0.81664	0.70673	1.4150	1.2215	I.7327	0.18336	0.42285	- 45
	.57738	.81647	.70717	.4141	.2248	.7319	.18353	.42262	44
17	.57762	.81630	.70760	.4132	.2250	.7312	.18369	.42238	43
18	.57786	.81614	.70804	.4123	.2253	.7305	.18386	.42214	42 41
19	.57809 0.57833	.81597 0.81580	.70848 0.70891	.4115 1.4106	.2255 I.2258	.7298 1.7291	0.18403	.42190 0.42167	40
21	.57857	.81563	.70935	.4097	.2260	.7284	.18437	.42143	30
22	.57881	.81546	.70979	.4089	.2263	.7277	.18453	.42119	39 38
23	.57904	.81530	.71022	.4080	.2265	.7270	.18470	.42096	37
24	.57928	.81513	.71066	.4071	.2268	.7263	. 18487	.42072	36
25	0.57952	0.81496	0.71110	1.4063	1.2270	1.7256	0.18504	0.42048	35
26	-57975	.81479	.71154	.4054	.2273	.7249	.18521	.42024	34
27	-57999	.81462	.71198	.4045	.2276	.7242	.18538	.42001	33
28	. 58023	.81445	.71241	.4037	.2278	.7234	. 18555	.41977	32
29	.58047	.81428	.71285	.4028	.2281	.7227	.18571	.41953	31
30 31	0.58070 .58094	0.81411	0.71329	1.4019	1.2283	1.7220	0.18588 .18605	0.41930 .41906	30
32	.58118	.81395	.71373	.4002	.2288	.7213	.18622	.41900	29 28
33	.58141	.81361	.71461	.3994	.2201	.7199	18639	.41859	27
34	.58165	.81344	.71505	.3985	.2293	.7192	.18656	.41835	26
35	0.58189	0.81327	0.71549	1.3976	1.2296	1.7185	0.18673	0.41811	25
35 36	.58212	.81310	.71593	.3968	.2298	.7178	.18690	.41788	24
37	.58236	.81293	.71637	-3959	.2301	.7171	.18707	.41764	23
38	.58259	.81276	.71681	:3951	.2304	.7164	.18724	.41740	22
39	. 58283	.81259	.71725	.3942	.2,306	.7157	.18741	.41717	21
40	0.58307	0.81242	0.71769	1.3933	1.2309	1.7151	0.18758	0.41693	20
4I 42	.58330	.81225	.71813	.3925	.2311	.7144	.18775	.41669	19 18
43	.58354 .58378	.81191	71901	.3908	.2314	.7130	.18309	.41622	17
44	.58401	.81174	.71945	.3899	.2319	.7123	18826	.41599	16
45 46	0.58425	0.81157	0.71990	1.3891	1.2322	1.7116	0.18843	0.41575	15
46	.58448	.81140	.72034	.3882	.2324	.7109	. 18860	.41551	14
47	.58472	.81123	.72078	.3874	.2327	.7102	.18877	.41528	13
48	.58496	.81106	.72122	. 3865	.2329	.7095	. 18894	.41504	12
49	. 58519	.81089	.72166	.3857	.2332	.7088	11681.	.41481	11
50	0.58543	0.81072	0.72211	1.3848	1.2335	1.7081	0.18928	0.41457	10
51 52	.58566	.81055	.72255	.3840	.2337	.7075	. 18945	.41433	9
53	.58614	.81033	.72344	.3823	.2342	.7003	.18979	.41386	7
54	.58637	.81021	.72388	.3814	.2345	.7054	18996	.41363	7 6
	0.58661	0.80987	0.72432	1.3806	1.2348	1.7047	0.19013	0.41339	5
55 56	.58684	.80970	.72477	.3797	.2350	.7040	.19030	.41316	4
57	.58708	.80953	.72521	.3789	.2353	.7033	.19047	.41292	3 2
57 58	.58731	.80936	.72565	.3781	.2355	.7027	.19064	.41268	2
59	. 58755	.80919	.72610	.3772	.2358	.7020	18001.	.41245	1
60	0.58778	0.80902	0.72654	1.3764	1.2361	1.7013	0.19098	0.41221	
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	M
125°									54°

Natural Trigonometric Functions

36°

126°

30			Maturar	TIMOUU		auctions			
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos	М
0	0.5\$778	0.80902	0.72654	1.3764	1.2361	1.7013	0,19098	0.41221	60
Ĭ	.55802	.80085	.72699	-3755	.2363	.7006	.19115	.41198	59
2	.53325	.80867	.72743	-3747	.2366	.6999	.19132	.41174	58
3	.53349	.80850	.72788	.3738	.2368	.6993	.19150	.41151	57
4	.53373	.80833	.72832	.3730	.2371	.6986	.19167	.41127	56
5 6	0.53896	0.80816	0.72877	1.3722	1.2374	1.6979	0.19184	0.41104	55
0	.58920	.80799 .80782	.72921	.3713 .3705	.2376	.6972	.19201	.41080 .41057	54 53
7 8	.58967	.80765	.73010	.3697	.2382	.6959	.19215	.41037	52 52
9	.53990	.80747	.73055	.3688	.2384	.6952	.19252	.41010	51
10	0.59011	0.80730	0.73100		1.2387	1.6945	0.19270	0.40986	50
11	.59037	.80713	.73144	.3672	.2389	.6938	.19287	.40963	49
12	.59060	.80695	.73189	.3663	.2392	.6932	.19304	.40939	48
13	.59081	.80670	.73234	.3655	.2305	6925	.19321	.40916	47
14	.59107	.80662	.73278	.3647	.2377	.6918	.19338	.40892	46
15	0.59131	0.80644 .80627	0.73323	1.3638 .3630	.2400	1.6912	0.19355	0.40869	45 44
17	.59154	.80610	.73368		.2405	.6898	.19373	.40822	43
18	.59201	.80593	.73457	.3613	.2408	.6891	.19407	.40799	42
19	.59225	.80376	.73502	.3605	.2411	.6885	.19424	.40775	41
20	0.59248	0.80553	0.73547	I.3597	1.2413	1.6878	0.19442	0.40752	40
21	.59272	.80541	.73592	-3588	.2416	.6871	.19459	.40728	39
22	59295	.80524	.73637	.3580	.2419	.6365	.19476	.40705	38
23	.59318	.80507	.73681	-3572	.2421	.6358 .6351	.19493	.40681	37 36
24	.59342	.80489 0.80472	0.73726	.3564 I.3555	.2424 I.2427	1.6345	0.19511	.40658 0.40635	35
25 26	0.59365	.80455	.73816	.3547	.2429	.6338	.19545	.40611	31
27	.59412	.80437	.73861	3539	.2432	.6331	.19562	.40588	33
28	.59435	.80420	.73906	.3531	.2435	.6825	.19580	.40564	32
29	-59459	.80403	-73951	.3522	.2437	6318	.19597	.40541	31
30	0.59482	0 80386	0.73996	1.3514	1.2440	1.6312	0.19614	0.40518	30
31	.59506	.80363	.74041	.3506	.2443	.6305	.19632	.40494	29 28
32	-59529	.80351	.74086	.3498	.2445	.6798 .6792	.19649	.40471	27
33	.59552 .59576	.80334	.74176		.2451	.6735	.19683	.40424	26
35	0.59599	0.80299	0.74221	1.3473	1.24.3	1.6779	0.19701	0.40401	25
36	.59622	.80282	.74266	.3465	.2456	.6772	.19718	.40377	24
37	.59646	.80264	.74312		.2459	.6766	.19736	.40354	23
38	.59669	.80247	.74357	-3449	.2461	.6759	.19753	.40331	22
39	.59692	.80230	.74402		.2464	.6752	.19770	.40307	21
40	0.59716	0.80212	0.74447	1.3432	1.2467	1.6746	0.19788	0.40284	20
41	•59739	.80195	.74492 .74538	.3424 .3416	.2170	.6739 .6733	.19805	.40237	19 18
43	.59762 .59786		.74583	.3408	.2475	.6726	.19840	.40214	17
44	.59809	.80143	.74628	.3400	.2478	.6720	.19857	.40191	16
45	0.59832	0.80125	0.74673	1.3392	1.2480	1.6713	0.19875	0.40167	15
46	.59856	.80103	.74719	.3383	.2483	.6707	.19892	.40144	14
47	.59879	.80090	-74764	-3375	.2486	.6700	.19909	.40121	13
48	.59902	.80073	.74809	.3367	.2488	.6694 .6687	.19927	.40098	13
49	.59926	.80056 0.80038	0.74900	.3359 I.335I	.249T	1.6681	0.19962	.40074 0.40051	10
50	0.59949	.80021	.74946	-3343	.2497	.6674	.19979	.40028	10
52	.59995	80003	.74991	-3335	.2499	.6668	.19997	.40004	8
53	.60019	.79986	.75037	.3327	.2502	.6661	.20014	.39981	7
54	.60042	.79968	.75082	.3319	.2505	.6655	.20031	-39958	
55	0.60065	0.79951	0.75128	1.3311	1.2508	1.6648	0,20049	0.39935	5
56	.60088	79933	.75173	.3303	.2510	.6642	.20066	.39911	4
57	.60112	.79916	.75219	.3294	.2513	.6636 .6629	.20084	.39888 .39865	3
58	,60158	.79898	.75264	.3286	.2516	.6623	.20101	.39842	Í
59 60	0.60181	0.79863	0.75355	1.3270	1.2521	1.6616	0.20136	0.39818	<u> </u>
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

142ª

87°			Natura	Trigon	ometric I	unctions			142
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.60181	0.79863	0.75355	1.3270	1.2521	1.6616	0.20136	0.39818	60
I	.60205	.79846	.75401	. 3262	. 2524	.6610	.20154	-39795	59
2	.60228	.79828 .79811	-75447	.3254	.2527	.6603	.20171	.39772	58
3 4	.60251	.79793	.75492 .75538	.3238	.2532	.6391	.20206	.39749 .39726	57 56
5	0 60298	0.79776	0.75584	1.3230	1.2535	1.6584	0.20224	0.39702	55
5	.60320	.79758	.75629	.3222	.2538	.6578	.20242	.39679	54
8	.60,344	.79741	.75675	.3214	.2541	.6572	.20259	.39656	53
9	.60367 .60390	.79723 .79706	.75721 .75767	.3206	.2543	.6565	.20277	.39633	52 51
10	0.60413	0.79638	0.75812	1.3190	1.2549	1.6552	0.20312	0.39586	50
11	.60437	.79670	.75858	.3182	.2552	.6546	.20329	.39563	49
12	.60460	.79653	.75904	.3174	.2554	.6540	.20347	.39540	49 48
13	.60483	.79635	.75950	.3166	.2557	.6533	.20365	.39517	47
14	.60506	.79618	.75996 0.76042	.3159 1.3151	.2560	.6527	.20382	-39494	46
15	0.60529 .60552	0.79600 .79582	.76088	.3143	1.2563	1.6521	0.20400	0.39471 -39447	45 44
17	.60576	.79565	.76134	.3135	.2568	.6508	.20435	.39447	43
18	.60599	.79547	.76179	.3127	.2571	.6502	.20453	.39401	42
19	.60622	.79530	.76225	.3119	.2574	.6496	.20470	39378	41
20	0.60645	0.79512	0.76271	1.3111	1.2577	1.6489	0.20488	0.39355	40
21	.60668	-79494	.76317	.3103	.2579	.6483	.20505	.39332	39
22	.60691 .60714	.79477 .79459	.76364	.3095	.2582	.6477 .6470	.20523	.39309	38 37
24	.60714	.79459	.76456	.3079	.2588	.6464	.20558	.39262	36
25	0 60761	0.79424	0.76502	1.3071	1.2591	1.6458	0.20576	0.39239	35
26	.60784	.79406	.76548	.3064	.2593	.6452	.20594	.39216	34
27	.60807	.79388	.76594	.3056	.2596	.6445	.20611	39193	.33
28	.60830	.79371	.76640	.3048	.2599	.6439	. 20629	.39170	32
29	.60853 0.60876	79353	.76686 0.76733	.3040 1.3032	.2602 1.2605	.6433 1.6127	.20647 0.20665	.39147	31
30	.60899	0.79335 .79318	.76779	.3032	.2607	.6420	.20682	.39124	30 29
32	.60922	.79300	.76825	.3016	.2610	.6414	.20700	.39078	28
33	.60915	79282	.76871	.3009	.2613	.6408	.20718	.39055	27
34	.60968	. 79264	.76918	.3001	.2616	.6102	. 207.35	.39031	26
35 36	0.60991	0 79247	0.76964	1.2993	1.2619	1.6396	0.20753	0.39008	25
.30	41016.	.79229	.77010	.2985	.2622	.6389 .6383	.20771	.38985	24
37 38	.61037 16061	.79193	.77057	.2977	.2627	.6377	.20806	.38939	23 22
39	.61084	.79176	.77149	.2962	.2630	.6371	.20824	.38916	21
40	0.61107	0.79158	0.77196	1.2954	1.2633	1.6365	0.20842	0.38893	20
41	.61130	.79140	.77242	.2946	.2636	.6359	.20860	.38870	19
42	.61153	.79122	.77289	. 2938	.2639	.6352	.20378	.38847	18
43	.61176	.79104	•77335	.2931	.2641	.6346 .6340	.20895	.38824	17 16
44	0.61222	0.79069	.77382 0.77428	1.2915	1.2647	1.6334	0.20931	0.38778	15
46	.61245	.79051	.77475	.2907	.2650	.6328	.20949	.38755	14
47	.61268	.79033	.77521	.2900	.2653	.6322	.20967	.38732	13
48	.61290	.79015	.77568	.2892	, 2656	.6316	.20984	.38709	12
49	.61314	.78998	.77614	.2884	.2659	.6309	.21002	.38686	11
50 51	0.61337	0.78980 .78962	0.77661	1.2876 .2869	1.2661 .2664	1.6303	.21038	0.38663	10
52	.61383	.78944	.77708	.2861	2667	.6297	.21035	38617	9 8
53	.61405	.78926	.77801	.2853	2670	.6285	.21074	.38594	7
54	.61428	78908	.77848	.2845	,2673	.6279	.21091	.38571	7 6
55	0.61451	0.78890	0.77895	1.2838	1.2676	1.6273	0.21109	0.38548	5
56	.61474	.78873	.77941	. 28.30	.2679	.6267	.21127	.38525	4
57 58	.61497	.78855 .78837	.77988	.2822	.2681	.6261 .6255	.21145	.38503	3 2
50	.61543	.78819	78035	.2807	.2687	.6249	.2110.5	.38457	ī
59 60	0.61566	0.78801	0.78128	1.2799	1.2690	1.6243	0.21199	0.38434	ō
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

127*

350			Natural	Trigono	metric F	unctions			141
M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.61566	0.78801	0 78128	I.2799	T. 2690	1.6243	0.21199	0.38434	60
1	61589	. 78783	.78175	.2792	.2693	.6237	.21217	.38411	59
2	.61612	.78765	.78222	. 2784	. 2696	.6231	.21235	.38388	58
3 4 5 6	.61635	.78747	.78269	.2776	.2699	.6224	.21253	.38365	57 56
4	.61658	.78729	.78316	. 2760	.2702	.6218	.21271	.38342	50
5	0.61681	0.78711	0.78363		I.2705	1.6212	0.21288	0.38319	55
6	.61703	.78693	.78410	.2753	.2707	.6206	.21306	.38296	54
7 8	.61726	.78675	.78457	.2746	.2710	.62∞	.21324	.38273	53
	.61749	.7 8657	.78504	.2738	.2713	.6194 .6188	.21342	.38251	52 51
9	.61772	.78640	.78551	.2730	.2716	1.6182	0.21360	0.38205	50
10	0.61795 .61818	0.78622 .78604	0.78598	1.2723	1.2719	.6176	.21396	.38182	40
II I2	.61816	.78586	.78692	.2715	.2722	.6170	.21390	.38159	49 48
13	.61864	.78568	.78739	.2700	.2728	.6176	.21432	.38136	47
14	.61886	.78550	.78786	.2692	.2731	.6159	.21450	.38113	47 46
15	0.61000	0.78532	0.78834	1.2685	1.2734	1.6153	0.21468	0.38091	45
15	.61932	.78514	.78881	.2677	.2737	.6147	.21486	.38068	44
17	.61955	.78496	.78928	.2670	.2739	.6141	,21504	.38045	4.3
81	.61978	.78478	.78975	.2662	.2742	.6135	.21522	.38022	42
19	.62001	.78460	.79022	.2655	.2745	.6129	.21540	.37999	41
20	0.62023	0.78441	0.79070	1.2647	1.2748	1.6123	0.21558	0.37976	40
2[.62046	.78423	.79117	.2639	.2751	.6117	.21576	-37954	39
22	62069	.78405	.79164	.2632	.2754	1116.	.21594	.37931	38
23	.62092	.78387	.79212	.2624	.2757	.6105	.21612	.37908	37
24	.62115	.78369	.79259	.2617	.2760	.6099	.21631	.37885	კ6
25	0.62137	0.78351	0.79306	1.2609	1.2763	I 6093	0.21649	0.37862	35
26	.62160	.78333	.79354	.2602	.2766	.6087	.21667	.37840	34
27	.62183	.78315	.79401	.2594	.2769	1800,	.21685	.37817	33
28	.62206	.78297	.79449	.2587	.2772	.6077	.21703	-37794	32 31
29	.62229	.78279	.79496	.2579	.2775	.6070 I 6064	.21721	.3777I 0 37748	30
30	0.62251	0.78261	0.79543	1.2572	1.2778	.6058	0.21739	.37726	29
3.5	.62274 .62297	.78243 .78224	.79591	.2564	.2784	.6052	.21775	.37703	28
32 33	.62320	.78206	.79686	.2557 .2549	.2787	.6046	.21793	.37680	27
	.62342	.78188	79734	.2549	2790	.6040	.21812	.37657	27 26
34	0.62365	0.78170	0.79781	1.2534	1.2793	1.6034	0,21830	0 37635	25
36	.62388	.78152	.79829	.2527	.2795	.6029	.21848	.37612	24
37	.62411	.78134	.79876	.2519	.2798	.6023	.21866	.37589	23
38	.62433	.78116	.79924	.2512	.2801	.6017	.21884	.37566	22
39	.62456	.78097	.79972	.2504	.2804	1100.	.21902	-37544	21
40	0.62479	0.78079	0.80020	1.2497	1.2807	1.6005	0.21921	0.37521	20
41	.62501	.78061	.80067	.2489	.2810	.6000	.21939	.37498	19
42	.62524	.78043	.80115	.2482	.2813	-5994	.21957	.37476	18
43	.62547	.78025	.80163	.2475	.2816	.5988	.21975	-37453	17
44	.62570	.78007	.80211	.2467	.2819	.5982	.21993	-37430	16
45	0.62592	0.77988	0.80258	1.2460	1.2822	1.5976	0.22011	0.37408	15
46	.62615	.77970	.80306	.2452	.2825	.5971	.22030	.37385	14
47	.62638	.77952	.80354	.2445	.2828 .2831	.5965	.22048	.37362	13 12
48	.62660		.80402	.2437		•5959	.22084	.37340	II
49	.62683 0.62706	.77915 0.77897	.80450 0 80498	.2430 I.2423	.2834 1.2837	.5953 1.5947	0.22103	.37317 0.37294	10
50 51	.62728	.77879	.80546	.2415	.2840	.5947	,22121	.37272	
52	.62751	.77861	.80594	.2408	.2843	.5936	.22139	.37249	9 8 7 6
53	.62774	.77842	.80642	.2400	.2846	.5930	.22157	.37226	7
54	.62796	.77824	.80690	.2393	.2849	.5924	.22176	.37204	6
55	0.62819	0.77806	0.80738	1.2386	1.2852	1.5919	0.22194	0.37181	5
56	.62841	.77788	.80786	.2378	.2855	.5913	.22212	.37158	5 4 3
57	.62864	.77769	.80834	.2371	.2858	.5907	.22230	.37136	3
58	.62887	.77751	.80882	.2364	.2861	.5901	.22249	.37113	2
59 60	.62909	.77733	.80930	.2356	.2864	.5896	.22267	.37090	I
60	0.62932	0.77715	o 80978	1.2349	1.2867	1.5890	0.22285	0.37068	
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos	Vrs. Sin.	M

390

Natural Trigonometric Functions

140°

M Sine Cosine Tan. Cotan. Secant Cosec. Vrs. Sin. Vrs. Cos. M				Matura			r unctions			
T	М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin	Vrs. Cos.	М
2		0.62932	0.77715	0 80975	I.2319	1,2867	1.5890	0, 22 285	0.37068	60
2			.77696		.2342		.5884	. 22,304		59
4						.2874	.5879	. 22322		58
5 0 6 9045 0.77623 0.81219 1.2312 1.2885 1.8856 0 23377 0.69655 55 7 .63999 .77586 .81316 .2297 .2889 .5856 .22339 .36937 .36919 53 8 .63113 .77568 .81366 .2297 .2889 .5856 .22339 .36835 52 9 .63135 .77519 .81413 .2263 .2892 .5839 .22450 .36855 52 10 .66135 .77513 .81650 .2268 .2901 .5832 .22467 .36825 51 11 .63120 .77416 .81606 .2254 .2907 .5816 .22521 .36771 47 13 .63223 .77476 .81606 .2254 .2907 .5816 .22521 .36771 47 14 .63233 .77472 .81635 .2217 .2901 .5812 .22248 .36797 48 15							.5873			57
7 .65099 .77586 .81316 .2297 .2899 .5845 .22432 .36987 52 9 .63133 .77580 .81433 .2283 .2895 .5843 .22450 .36887 52 10 .61135 .77751 .81461 1.2276 .2895 .5839 .22469 .36887 52 11 .61260 .77751 .81661 1.2276 1.2898 1.5831 .22469 .36824 50 12 .61203 .77494 .81555 .2661 .2904 .5822 .2255 .36774 47 13 .61223 .77476 .81666 .2254 .2907 .5816 .22521 .36774 47 14 .61223 .77421 .81752 .2232 .2916 .5899 .2256 .36729 45 15 .61233 .77421 .81850 .2223 .2916 .5899 .22561 .36624 22 .2816 .9932 .2286	4						.5867		. 36977	
7 .65099 .77586 .81316 .2297 .2899 .5845 .22432 .36987 52 9 .63133 .77580 .81433 .2283 .2895 .5843 .22450 .36887 52 10 .61135 .77751 .81461 1.2276 .2895 .5839 .22469 .36887 52 11 .61260 .77751 .81661 1.2276 1.2898 1.5831 .22469 .36824 50 12 .61203 .77494 .81555 .2661 .2904 .5822 .2255 .36774 47 13 .61223 .77476 .81666 .2254 .2907 .5816 .22521 .36774 47 14 .61223 .77421 .81752 .2232 .2916 .5899 .2256 .36729 45 15 .61233 .77421 .81850 .2223 .2916 .5899 .22561 .36624 22 .2816 .9932 .2286	2		0.77023						0.30955	55
9	4		77586						36010	
9	8								36887	33
10					.2283				.36865	
12	10						1.5833		0.36842	
12		.63180	-77513	.81509	.2268	.2901	.5828	.22487	.36820	49
14				.81558			.5822			48
15		.63225					.5816			47
16			-77458							
17	15						1.5805		0.30729	
18				81800					36684	
19	1 18						5788		36662	
20							5783			
21							1.5777	0.22653	0.36617	
22	21	.63405		.81995				.22671	.36594	39
23			.77310			.2935	.5766	.22690	.36572	38
25									.36549	37
27 .61516 .77218 .82287 .2152 .2950 .5738 .22782 .364369 .33 28 .63563 .77199 .8236 .2145 .2950 .5738 .22800 .36437 .32 29 .63583 .77161 .82385 .2138 .2956 .5727 .22819 .36415 .31 30 .6,653 .77144 .82482 .2124 .2963 .5716 .22856 .36372 .036372 .036372 .036375 .77107 .82580 .2109 .2969 .5705 .22874 .36417 .28 .34 .63697 .77070 .82678 1.205 1.2975 .5569 .22912 .36302 .26 .36 .63742 .77070 .82777 .2088 .2978 .5683 .22949 .36288 .21 .20 .2975 .5583 .22949 .36288 .21 .20 .2975 .5683 .22949 .36288 .21 .20 .2075 .36480 .22		.63473							.36527	36
27 .61516 .77218 .82287 .2152 .2950 .5738 .22782 .364369 .33 28 .63563 .77199 .8236 .2145 .2950 .5738 .22800 .36437 .32 29 .63583 .77161 .82385 .2138 .2956 .5727 .22819 .36415 .31 30 .6,653 .77144 .82482 .2124 .2963 .5716 .22856 .36372 .036372 .036372 .036375 .77107 .82580 .2109 .2969 .5705 .22874 .36417 .28 .34 .63697 .77070 .82678 1.205 1.2975 .5569 .22912 .36302 .26 .36 .63742 .77070 .82777 .2088 .2978 .5683 .22949 .36288 .21 .20 .2975 .5583 .22949 .36288 .21 .20 .2975 .5683 .22949 .36288 .21 .20 .2075 .36480 .22	25									35
28 6.3363 .77199 .82336 .2145 .2953 .5732 .2280 .36437 32 30 6.3585 .77181 .82385 .2138 .2956 .5727 .22819 .36437 32 30 0.6363 .77162 .82434 1.2131 1.2960 1.5721 .22856 .36372 36392 30 31 .63653 .77127 .82531 .2117 .2966 .5710 .22856 .36372 .36472 .36472 .36472 .3850 .2109 .2966 .5710 .22893 .36325 .27 .36472 .36372 .22837 .36325 .27 .22893 .36325 .27 .22837 .36325 .27 .2396 .3570 .22909 .3528 .22949 .3628 .25 .36 .63742 .77051 .8277 .2881 .2981 .5683 .22949 .36233 .23 .36 .63742 .77031 .82777 .2881 .2981 .5683 .229	20								.30482	34
299 63585 .77181 .82385 .2138 .2956 .5727 .22819 .36415 31 33 0 6,668 0.77162 0.82433 1.2131 1.2960 1.5721 0.22837 0.36392 30 33 0.6653 0.77144 .82482 .2124 .2963 .5716 .22854 .36372 .36372 .39 33 .63675 .77167 .82580 .2109 .2969 .5705 .22874 .3647 .28 .34 .63697 .77067 .82580 .2109 .2969 .5705 .22837 .36325 .27 .36322 .26 .35716 .22854 .3647 .28 .35 .28 .29									36437	33
30 0.0,000 0.77102 0.32231 1.2131 1.2906 1.5721 0.22837 0.30392 30 32 0.63633 0.77144 8.2482 2.124 2.966 5.710 2.2874 3.6447 28 33 6.3675 0.77107 8.2580 2.109 2.969 5.705 2.2874 3.6447 28 33 6.3697 0.77083 8.2629 2.102 2.972 5.5699 2.2912 3.6302 26 35 6.63742 0.77051 8.2727 2.088 2.978 5.5683 2.2907 0.36285 24 37 6.3765 0.77051 8.2727 2.088 2.978 5.5683 2.2906 0.36285 24 37 6.3765 0.77051 8.28727 2.088 2.978 5.5683 2.2906 0.36285 24 38 6.3787 0.77031 8.2776 2.081 2.981 5.5683 2.2907 3.6235 23 38 6.3787 0.77034 8.2825 2.074 2.985 5.5677 2.2985 3.2333 2.2 39 6.3810 0.76996 8.2871 2.066 2.2988 5.5672 2.2004 3.6190 21 41 6.3854 0.76936 8.2972 2.052 2.994 5.5615 2.3061 3.6146 19 42 6.3877 0.76936 8.3022 2.045 2.997 5.5555 2.3060 3.6163 20 44 6.3921 0.76921 8.3071 2.038 3.000 5.5650 2.3079 3.6101 17 4.63989 0.76621 8.3071 2.038 3.000 5.5635 2.23060 3.6103 18 4.63904 0.76884 0.83169 1.2024 1.3006 5.5633 2.2316 0.30036 1.6 4.6 6.0966 0.76975 8.3218 2.016 3.010 5.5633 2.23153 3.3011 13 4.6 6.0966 0.76856 8.3218 2.016 3.010 5.5633 2.23153 3.3011 13 4.6 6.0036 0.76971 8.3667 2.009 3.016 5.5622 2.23172 3.3989 12 4.0078 0.76772 8.3465 1.995 3.001 5.5617 2.3190 0.33941 10 5.553 0.64167 0.76584 8.3514 1.995 3.001 5.553 0.23216 3.33900 5.550 0.23207 0.33941 10 5.553 0.64167 0.76694 8.3712 1.996 3.004 5.559 2.23265 3.33985 12 3.566 0.64185 0.76698 8.3761 1.993 3.004 5.559 2.23265 3.33985 12 3.566 0.64185 0.76694 8.3516 1.994 3.004 5.559 2.2326 3.33900 3.3585 6 5.56423 0.76602 8.3761 1.993 3.004 5.555 0.23205 0.33313 5.566 2.2327 3.3585 6 5.5566 0.		63585				2056				21
31 6.3630 -771141 8.2482 2.124 2.963 5.716 2.2556 3.6370 29 32 6.3653 -77125 8.2531 2.2179 2.966 5.710 2.2874 3.6447 28 33 6.3675 -77107 8.2580 2.2109 2.969 5.705 2.2893 3.6325 27 34 6.3675 -77070 8.2580 2.102 2.972 5.5699 2.2912 3.3632 26 35 6.3742 -77070 8.2678 1.2095 1.2975 1.5694 0.22310 0.36280 25 36 6.3742 -77031 8.2727 2.088 2.978 5.688 2.2949 3.6235 23 38 6.3787 -77031 8.2727 2.088 2.978 5.683 2.2949 3.6235 23 38 6.3787 -77031 8.2825 2.074 2.985 5.677 2.2085 3.6233 23 39 6.3810 -76996 8.2871 2.056 2.288 5.672 2.2084 3.6100 21 41 6.4854 -76958 8.2972 2.052 2.294 5.661 2.2041 3.6146 19 42 6.3877 -7694 8.3022 2.045 2.997 5.655 2.2364 3.6100 21 43 6.3929 -76921 8.3071 2.038 3.3000 5.650 2.2307 3.6101 17 44 6.3921 7.6903 8.3120 2.031 3.003 5.644 2.2307 3.6011 17 4.646 6.3964 6.76854 8.3218 2.016 3.3010 5.633 2.2315 3.3001 47 6.3989 7.6847 8.3667 2.009 3.013 5.612 2.3114 3.0633 14 4.6033 7.6791 8.3367 2.009 3.013 5.612 2.3113 3.0031 14 4.6033 7.6791 8.3367 2.009 3.013 5.622 2.3172 3.3989 12 4.6078 7.6792 8.3415 1.1983 1.3022 2.315 3.3001 13 3.000 3.5033 2.3153 3.0011 13 3.000 3.5033 2.3153 3.0011 3.000 3.5033 2.3153 3.0011 3.000 3.5033 2.3153 3.0011 3.000 3.00000 3.00000 3.00000 3.00000 3.00000				0.82434		1.2060				30
32 6,3653 .77125 .82531 .2117 .2966 .5710 .22874 .36147 28 33 6,3675 .77107 .82850 .2109 .2969 .5705 .22893 .36325 27 34 .63697 .77070 .82678 1.2952 1.2975 1.5694 0.22912 .36302 26 35 .63742 .77051 .82727 .2081 .2981 .5683 .22967 .36235 21 37 .63765 .77031 .82776 .2081 .2981 .5683 .22967 .36235 23 38 .63787 .77014 .82825 .2074 .2985 .5677 .22986 .36233 22 39 .63810 .76997 .82823 1.2059 1.2991 1.5666 0.23023 0.36168 20 41 .6384 .76937 .83927 .2052 .2994 .5661 .23030 .36166 19 42 .63877					.2124	.2963				29
34 .63697 .77083 .88629 .2102 .3699 .22912 .36302 26 35 0.63720 0.77070 0.82678 1.2025 1.2975 1.5694 0.22910 0.36280 25 36 0.63742 .77031 82727 .2088 .2978 .5683 .22949 .36285 21 37 .63765 .77031 .82727 .2081 .2981 .5683 .22967 .36235 23 38 .63787 .77011 .82825 .2071 .2985 .5677 .22985 .36213 22 40 0.5382 .76977 .82923 1.2091 1.5666 0.23023 .36163 20 41 .63874 .76938 .82972 .2052 .2994 .5661 .23041 .36163 20 42 .63877 .76938 .83022 .2015 .2997 .5655 .23041 .36163 21 43 .63921 .76903 .83120			.77125	.82531		.2966	.5710	.22874		
35 0.63720 0.7070 0.82678 1.2095 1.2975 1.5694 0.2930 0.36280 25 36 .63742 .77051 .82727 .2081 .2978 .5688 .22949 .36238 24 37 .63765 .77031 .82776 .2081 .2981 .5683 .22967 .36233 23 38 .63787 .77014 .82825 .2074 .2985 .5677 .22985 .36213 22 40 0.63832 0.76977 0.82923 1.2056 .2988 .5672 .2304 .36190 21 41 .6384 .76938 .82072 .2025 .2994 .5661 .23032 0.36163 20 42 .63877 .76910 .83022 .2045 .2997 .5655 .23060 .36123 18 43 .03921 .76903 .83120 .2031 .3003 .5641 .23079 .36013 18 45 .0.63944 </td <td>33</td> <td></td> <td></td> <td>.82580</td> <td></td> <td>.2969</td> <td></td> <td></td> <td></td> <td>27</td>	33			.82580		.2969				27
37 .63765 .77031 .82776 .2081 .2981 .5683 .22967 .36235 23 38 .63787 .77014 .82825 .2974 .2985 .5677 .22986 .36213 22 39 .63810 .76996 .82871 .2066 .2988 .5672 .23004 .36190 21 40 0 63832 0.76977 0.82923 1.2059 1.2991 1.5666 0.23023 0.36165 20 41 .63871 .76936 .83027 .2052 .2994 .5661 .23030 0.36165 20 42 .63877 .76921 .83071 .2038 .3000 .5655 .23060 .36123 18 43 .63991 .76921 .83071 .2038 .3000 .5653 .23060 .36078 16 45 0.6934 0.76884 0.83169 1.2024 1.3006 1.5639 0.2316 0.36056 15 46 .699	34						.5699			
37 .63765 .77031 .82776 .2081 .2981 .5683 .22967 .36235 23 38 .63787 .77014 .82825 .2974 .2985 .5677 .22986 .36213 22 39 .63810 .76996 .82871 .2066 .2988 .5672 .23004 .36190 21 40 0 63832 0.76977 0.82923 1.2059 1.2991 1.5666 0.23023 0.36165 20 41 .63871 .76936 .83027 .2052 .2994 .5661 .23030 0.36165 20 42 .63877 .76921 .83071 .2038 .3000 .5655 .23060 .36123 18 43 .63991 .76921 .83071 .2038 .3000 .5653 .23060 .36078 16 45 0.6934 0.76884 0.83169 1.2024 1.3006 1.5639 0.2316 0.36056 15 46 .699	35						1.5094			
38 6.3787 .77014 .82825 .2074 .2985 .5677 .22985 .36213 32 39 .63810 .76996 .82871 .2066 .2988 .5672 .23041 .36190 21 40 .63832 .0.76977 0.82923 1.2059 1.2991 1.5666 0.23023 0.36168 20 41 .63871 .76938 .82972 .2052 .2991 .5661 .23041 .36163 19 43 .63877 .76930 .83022 .2045 .2997 .5655 .23079 .36123 18 43 .63921 .76903 .83120 .2031 .3000 .5650 .23079 .36101 17 45 .0.63944 0.76854 .83128 .2016 .3010 .5633 .23136 .36936 15 47 .03989 .76817 .81267 .2009 .3013 .5622 .23172 .339691 12 49 .64031<	37	63765				2087	-5000			
39	38	63787				2085				
40 0 0.3832 0.70977 0.82923 1.2059 1.2091 1.5000 0.23023 0.30108 20 42 6.9877 .76940 .83022 .2045 .2097 .5655 .23050 .36146 19 43 6.9897 .76940 .83022 .2045 .2097 .5655 .23050 .36123 18 44 6.9921 .76903 .83120 .2031 .3000 .5650 .23079 .36101 17 44 6.9921 .76903 .83120 .2031 .3003 .5644 .23097 .36078 16 45 0.03944 0.76884 0.83169 1.2024 1.3006 1.5633 .23134 0.36034 14 6.69396 .76857 .83218 .2016 .3010 .5633 .23134 .3003 .23134 0.36034 14 7 6.3989 .76817 .83267 .2009 .3013 .5623 .23153 .30011 13 48 6.0011 .76828 .8317 .2002 .3016 .5623 .23153 .30011 13 48 6.0011 .76828 .8317 .2002 .3016 .5622 .23172 .33989 12 49 .64031 .76810 .83366 .1995 .3019 .5617 .23190 .33941 10 50 6.4058 0.76791 0.8315 1.1983 1.3002 1.5611 0.23209 0.33944 10 51 6.0078 .76772 .83465 .1981 .30025 .5506 .23227 .33922 9 52 .64100 .76754 .83514 .1974 .3029 .5600 .23224 .33900 8 53 6.4123 .76735 .83563 .1967 .3012 .5505 .23265 .33900 8 53 6.4123 .76735 .83563 .1967 .3012 .5505 .23265 .33890 8 55 6.64123 .76735 .83563 .1967 .3012 .5505 .23265 .338855 6 55 6.4185 .76969 .83762 .1993 .3044 .5579 .23230 .338315 4 58 6.2242 .76660 .83761 .1993 .3044 .5573 .23330 .33831 5 58 6.4214 .76642 .83811 .1994 .3041 .5579 .23230 .33381 4 6 58 6.4244 .76642 .83811 .1994 .3044 .5573 .23330 .33831 5 58 6.4244 .76642 .83811 .1994 .3044 .5573 .23330 .33831 5 58 6.4244 .76642 .83811 .1994 .3044 .5573 .23330 .33831 5 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33885 3 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33885 3 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33885 3 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33885 3 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33885 3 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33885 3 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33788 3 58 6.4244 .76642 .83811 .1992 .3044 .5573 .23339 .33788 .35766 .2347 .36642 .83811 .1992 .3044 .5573 .23339 .33785 .35766 .2347 .36424 .76662 .83761 .1939 .3044 .55573 .23339 .33585 .35766 .2347 .36424 .36424 .76642 .83811 .1992 .3044 .5573 .23339 .33788 .3						.2088			.36100	
41 6,1354 .76638 .82072 .2052 .2994 .5661 .23041 .36146 19 42 .63877 .76940 .83022 .2045 .2997 .5655 .23060 .36123 18 43 .63899 .76921 .83071 .2038 .3000 .5650 .23097 .36010 17 44 .63921 .76903 .83120 .2031 .3003 .5644 .23097 .36056 15 45 .63966 .76884 .83169 .2024 .3006 .15639 .023116 0.23160 0.23161 0.36056 15 46 .63966 .76857 .8328 .2016 .3010 .5633 .23134 .36034 14 47 .03989 .76817 .81267 .2009 .3013 .5628 .23153 .30611 13 48 .64011 .76828 .83317 .2002 .3016 .5622 .23172 .33969 12						1.2001	1.5666		0.36168	
43	41	.63854	.76958	.82972	.2052		.5661		.36146	
43			.76940	.83022	.2015	.2997	.5655	.23060		18
45			.76921	.83071		.3000	.5650			17
46		.63921								
47 63989 .76817 83267 .2009 .3013 .5628 .23153 .36011 13 48 .64011 .76828 .83317 .2002 .3016 .5622 .23173 .35989 12 49 .64033 .76810 .83366 .1995 .3019 .5617 .23190 .33967 11 50 0.64056 0.76791 0.83415 1.1983 1.3022 1.56117 0.23209 0.33944 10 51 .64078 .76772 0.83465 .1981 .3025 .5600 .23227 0.33922 9 52 .64100 .76754 .83514 .1971 .3029 .5600 .232316 .33900 8 53 .64123 .76735 .83563 .1967 .3023 .5500 .23283 .33857 7 54 .64145 .76716 .83662 1.1953 .1933 .1584 0.23302 .33835 6 55 .64189	45	62066								
48		62080					-5033			
49					2002		5622			
50 0.64056 0.76791 0.83415 1.3023 1.3022 1.3611 0.23209 0.33594 10 51 64078 .76772 8.3465 1.981 .3025 .5660 2.3227 .33922 9 52 .64100 .76754 .83514 .1971 .3029 .5600 .23216 .33900 8 53 .64123 .76735 .81563 .1960 .3013 .5750 .23236 .33877 7 55 .64165 0.76679 .83712 .1960 .3013 .5584 0.23302 0.38331 5 56 .64189 .76679 .83712 .1964 .3041 .5579 .23321 0.33831 4 57 .64214 .76642 .83761 .1919 .3044 .5573 .23339 .33785 3 58 .62234 .76642 .83860 .1924 .3051 .5563 .23353 .335766 2 59 .64276				.83366					35967	
51 .64078 .76772 .83465 .1981 .3025 .5606 .23227 .33922 9 52 .64102 .76754 .83514 .1971 .3029 .5600 .23246 .33900 8 53 .64123 .76737 .83563 .1967 .3032 .55705 .23265 .33877 7 54 .64167 .76698 .83662 .1950 .3035 .5590 .23283 .338835 5 56 .64189 .76679 .83712 .1994 .3041 .5579 .23321 .33810 4 57 .64212 .76660 .83761 .1939 .3044 .5573 .23339 .33883 3 58 .64234 .76642 .83811 .1932 .3048 .5563 .23337 .33763 .33766 2 59 .64279 .76623 .83800 .1924 .3051 .5563 .23377 .3543 1 60 0.					1.1983		1.5611	0.23209		
52 .64100 .76754 .83514 .1971 .3029 .5600 .23236 .33900 8 53 .64123 .76735 .83563 .1967 .3022 .5505 .23265 .23265 .23265 .23265 .23265 .35877 7 54 .64165 .76698 .0.83662 1.1933 1.3038 1.5584 0.23302 0.33831 5 56 .64189 .76679 .83712 .1946 .3041 .5579 .23231 .338810 4 57 .64212 .76660 .83761 .1939 .3044 .5573 .23339 .33788 3 58 .64234 .76642 .81811 1912 .3044 .5573 .23337 .35766 2 59 .64256 .76623 .81960 .1924 .3051 .5551 .23377 .35743 1 60 0.64279 0.76604 0.83910 1.1917 1.3054 1.5557 0.23395 <td< td=""><td></td><td></td><td>.76772</td><td>.83465</td><td>.1981</td><td></td><td>.5606</td><td>.23227</td><td></td><td>9</td></td<>			.76772	.83465	.1981		.5606	.23227		9
53 .64123 .76735 .83563 .1967 .3032 .5595 .23265 .33877 7 54 .64145 .76716 .83613 .1960 .3335 .5590 .23283 .33855 6 55 0.64167 0.76698 0.83662 1.1953 1.3038 1.5584 0.23302 0.33833 5 56 .64189 .76679 .83712 .1946 .3041 .5579 .23321 .33810 4 57 .6212 .76660 .83761 .1939 .3044 .5573 .23339 .35783 3 58 .64234 .76642 .83811 .1932 .3048 .5568 .23358 .35768 2 59 .64279 .76694 .83910 1.1917 1.3054 1.5557 0 23395 0.33721 0	52		.76754	.83514	.1971	.3029	.56∞	.23216	.35900	8
55 0.64167 0.76698 0.83662 1.1953 1.3038 1.5584 0.23302 0.35833 5 56 .64189 .76679 .83712 .1946 .3041 .5579 .23321 .33818 4 57 .64212 .76660 .83761 1939 .3044 .5573 .23339 .33788 3 58 .64234 .76642 .83811 .1932 .3048 .5568 .23358 .35766 2 59 .64269 .76664 .83910 .1924 .3051 .5563 .23377 .35743 1 60 0.64279 0.76604 0.83910 1.1917 1.3054 1.5557 0.23395 0.33721 0	53		.76735	.83563	.1967	.3032			.35877	7
57 .64212 .76660 .83761 .1939 .3044 .5573 .23339 .33788 3 58 .64234 .76622 .83811 1912 .3048 .5568 .23335 .35766 2 59 .64256 .76623 .81860 .1924 .3051 .5561 .23377 .35743 1 60 0.64279 0.76604 0.83910 1.1917 1.3054 1.5557 0.23395 0.33721 0	54					.3035			35855	
57 .64212 .76660 .83761 .1939 .3044 .5573 .23339 .33788 3 58 .64234 .76622 .83811 1912 .3048 .5568 .23335 .35766 2 59 .64256 .76623 .81860 .1924 .3051 .5561 .23377 .35743 1 60 0.64279 0.76604 0.83910 1.1917 1.3054 1.5557 0.23395 0.33721 0	55								0.35833	
59 .04259 .70624 0.83910 1.1917 1.3054 1.5557 0.23377 .35743 1 60 0.64279 0.76604 0.83910 1.1917 1.3054 1.5557 0.23395 0.35721 0	50		70079						.35810	
59 .04259 .70624 0.83910 1.1917 1.3054 1.5557 0.23377 .35743 1 60 0.64279 0.76604 0.83910 1.1917 1.3054 1.5557 0.23395 0.35721 0	57								35705	3
	50									
	60					1.3054				
M Costue Sine Cotan. Tan. Cosec. Secant Vis. Cos. Vis. Sin. M										
	M	Cosine	oine	Cotan.	lan.	Cosec.	Secant	vrs. Cos.	vrs. Sin.	M

129°

EQ.

	6.	0]	T	C-1	Secant	Cosec.	17 Si-	Vrs. Cos.	М
M	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	V18. 5III.	V18. COS.	
١ ،	0.64279	0.76604	0.83910	1.1917	1.3054	1.5557	0.23395	0.35721	60
1	.64301	.76586	.83959	.1910	.3057	.5552	.23414	.35699	59
2	.64323	.76567	.84009	.1903	.3060	.5546	-23433	.35677	58
3	.64345	.76548	.84059	. 1896	.3064	.554I	.23452	.35654	57
4	.64368	.76530	.84108	.1889	.3067	.5536	.23470	. 35632	56
5 6	0.64390	0.76511	0.84158	1.1882	1.3070	1.5530	0.23489	0.35610 .35588	55 54
0	.64412	.76492	.84208 .84257	.1868	.3073	.5525 .5520	.23527	.35565	53
7 8	.64435 .64457	.76473 .76455	.84307	.1861	.3080	.5514	.23545	.35543	52
9	.64479	.76436	.84357	.1854	.3083	.5509	.23564	.35521	51
10	0.64501	0.76417	0.84407	1.1847	1.3086	1.5503	0.23583	0.35499	50
11	.64523	.76398	.84457	.1840	.3089	.5498	23602	.35476	49
12	.64546	.76380	.84506	. 1833	.3092	5493	. 23620	-35454	48
13	.64568	.76361	.84556	. 1826	.3096	.5487	.23639	·35432	47
14	.64590	.76342	.84606	.1819	.3099	.5482	.23658 0.23677	0.35410	46 45
15	0.64612	0.76323	0.84656 .84706	1.1812	1.3102	1.5477 .5471	.23695	-35365	45
17	.64635 .64657	.76304 .76286	.84756	.1798	.3109	.5466	.23714	-35343	43
18	.64679	.76267	.84806	.1791	.3112	.5461	.23733	.35321	42
19	.64701	.76248	.84856	.1785	.3115	.5456	.23752	35299	41
20	0.64723	0.76229	0.84906	1.1778	1.3118	1.5450	0.23771	0.35277	40
21	.64745	.76210	.84956	.1771	.3121	.5445	23790	.35254	39
22	.64768	.76191	.85006	.1764	.3125	.5440	.23808	.35232	38
23	.64790	.76173	.85056	.1757	.3128	•5434	.23827	.35210	37
24	.64812	.76154	.85107	.1750	.3131	-5429	.23846	.35188	36
25	0.64834	0.76135	0.85157	1.1743	1.3134	1.5424	0.23865	0.35166	35 34
26	.64856	.76116	.85207 .85257	.1736	.3138	.5419	.23903	.35144	33
28	.64900	.76078	.85307	.1729	.3144	.5408	.23922	.35099	32
29	.64923	.76059	.85358	.1715	.3148	.5403	.23940	.35077	31
30	0.64945	0.76041	0.85408	1.1708	1.3151	1.5398	0.23959	0.35055	30
31	.64967	76022	.85458	.1702	.3154	.5392	.23978	.35033	29
32	.64989	.76003	.85509	.1695	.3157	.5337	.23997	.35011	28
33	.65011		.85559	.1688	.3161	.5382	.24016	.34989	27 26
34	.65033		.85609	.1681 1.1674	1.3164	.5377 1.5371	.24035	.34967 0.34945	25
35 36	0.65055	0.75946	0.85660	.1667	.3170	.5366	.24073	.34922	24
37	.65100		.85761	.1660	.3174	.5361	.24092	.34900	23
38	.65121		.85811	.1653	.3177	.5356	.24111	.34878	22
39	.65144	.75870	.85862	.1647	.3180	.5351	.24130	.34856	21
40	0.65166	0.75851	0.85912	1.1640	1.3184	1.5345	0.24149	0.34834	20
41	.65188		.85963	.1633	.3187	.5340	.24168	.34812	19
42	.65210		.86013	.1626	.3190	-5335	.24186	-34790	18
43	.65232		.86064	.1619	.3193	.5330	.24205	.34768	17 16
44	0.65254		.86115 0.86165	1.1605	1.3200	.5325 1.5319	0.24224	0.34746	15
45 46	.65298		.86216	.1599	.3203	.5314	.24262	.34702	14
47	.65320		.86267	.1592	.3207	.5309	.24281	.34680	13
48	.65342	.757∞	.86318	.1585	.3210	.5304	.24300	.34658	12
49	.65364	.75630	.86368	.1578	.3213	.5299	.24319	.34636	11
50	0.65386	0.75661	0.86419		1.3217	1.5294	0.24338	0.34614	10
51	.65408		.86470		.3220	.5289	.24357	.34592	9 8
52	.65430	.75623	.86521	.1558	.3223	.5283	.24376	.34570	8
53 54	.65452		.86572 .86623	.1551	.3227	.5278	.24396	.34548	7 6
	0.65496		0.86674	1.1537	1.3233	1.5268	0.24434	0.34504	5
55 56	.65518		.86725	.1531	.3237	.5263	.24453	.34482	4
57	.65540	.75528	.86775	.1524	.3240	.5258	.24472	.34460	3
57 58	.65562	.75509	.86826	.1517	.3243	.5253	.24491	-34438	2
59	.65584	.75490	.86378	.1510	.3247	.5248	.24510	.34416	I
60	0.65606	0.75471	0.86929	1.1504	1.3250	1.5242	0.24529	0.34394	
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М
	Joshie	Unit	1	•••••	11 000000	5000000	1	1	

130°

							_		
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.65606	0.75471	0.86929	1.1504	1.3250	1.5242	0.24529	0.34394	60
I	.65628	.75452	.86980	.1497	.3253	.5237	.24548	.34372	
2	.65650	.75433	.87031	.1490	.3257	.5232	.24567	.34350	59 58
3	.65672	75414	.87082	. 1483	.3260	.5227	.24586	.34328	57
4	.65694	.75394	.87133	.1477	.3263	.5222	. 24605	.34306	56
5	0.65716 65737	0.75375	.87184	1.1470	1.3267	1.5217 .5212	0.24624	0.34284	55 54
7	.65759	.75356 .75 3 37	.87287	.1456	.3270	.5212	.24644	.34262	54 53
7 8	.65781	.75318	.87338	.1450	.3277	.5202	.24682	.34219	53 52
9	.65803	.75299	.87389	.1443	.3280	.5197	.24701	.34197	51
10	0.65825	0.75280	0.87441	1.1436	1.3284	1.5192	0.24720	0.34175	50
11	.65847	.75261	.87492	.1430	.3287	.5187	.24739	.34153	49
12	.65869	.75241	.87543	.1423	.3290	.5182	.24758	.34131	48
13	.65891	.75222	.87595	.1416	.3294	.5177	.24778	.34109	47
1.4	.65913	.75203	.87646 0.87698	1.1403	-3297	.5171	.24797	.34087	46
15 16	0.65934 .65956	0.75184	.87749	.1396	1.3301 .3304	1.5166 .5161	0.24816	0.34065	45 44
17	.65978	.75146	.87801	.1389	.3307	.5156	.24854	.34022	43
18	.66000	.75126	.87852	.1383	.3311	.5151	.24873	.34000	42
19	.66022	.75107	.87904	.1376	.3314	.5146	.24893	.33978	41
20	0.66044	0.75088	0.87955	1.1369	1.3318	1.5141	0.24912	0.33956	40
21	.66066	.75069	.88007	.1363	.3321	.5136	.24931	•33934	39
22	.66087	.75049	.88058	.1356	-3324	.5131	.24950	.33912	38
23	.66109	.75030	.88110 .88162	.1349	.3328	.5126	.24970	.33891	37
24 25	.66131 0.66153	.75011 0.74992	0.88213	.1343 1.1336	.3331 1.3335	.5121 1.5116	.24989 0.25008	.33869 0.33847	36 3 5
26	.66175	.74973	.88265	.1329	.3338	.5111	.25027	.33825	34
27	.66197	74953	.88317	.1323	.3342	.5106	.25047	.33803	33
28	.66218	.74934	.88369	.1316	3345	.5101	.25066	.33781	32
29	.66240	.74915	.88421	.1309	.3348	.5096	.25085	.33760	31
30	0.66262	0.74895	0.88472	1.1303	1.3352	1.5092	0.25104	0.33738	30
31	.66284	.74876	.88524	.1296	• 3 355	.5087	.25124	.33716	29
32	.66305 .66327	.74857	.88576 .88628	.1290	-3359	.5082	.25143	.33694	28
33	.66349	.74838	.88680	.1203	.3362 .3366	.5077 .5072	.25162 .25181	.33673 .33651	27 26
34 35	0.66371	0.74799	0.88732	1.1270	1.3369	1.5067	0.25201	0.33629	25
36	.66393	.74780	.88784	.1263	-3372	.5062	.25220	.33607	24
37	.66414	74760	.88836	.1257	.3376	.5057	.25239	.33586	23
38	.66436	.74741	.88888	.1250	-3379	.5052	.25259	.33564	22
39	.66458	.74722	.88940	.1243	•33 ⁸ 3	.5047	.25278	-33542	21
40	0.66479	0.74702	0.88992	I.1237	1.3386	1.5042	0.25297	0.33520	20
41	.66501 .66523	.74683 .74664	.89044	.1230	.3390	.5037	.25317	-33499	19 18
42	.66545	.74644	.89149	.1224	.3393 .3397	.5032	.25336	-33477 -33455	17
43	.66566	.74625	.89201	.1211	.3400	.5022	.25375	-33433	16
45	0.66588	0.74606	0.89253	1.1204	1.3404	1.5018	0.25394	0.33412	15
46	.66610	.74586	.89306	.1197	.3407	.5013	.25414	.33390	14
47	.66631	.74567	.89358	.1191	.3411	.5008	.25433	.33368	13
48	.66653	.74548	.89410	.1184	.3414	.5003	.25452	-33347	12
49	.66675 0.66697	.74528	.89463	.1178	.3418	.4998	.25472	-33325	II
50 51	.66718	0.74509	.89515	.1165	1.3421 .3425	1.4993	0.25491	0.33303	
52	.66740	.74470	.89620	.1158	.3428	.4983	.25530	.33260	9
53	.66762	74450	.89672	.1152	.3432	4979	.25549	.33238	7 6
54	.66783	.74431	.89725	.1145	.3435	.4974	. 25569	.33217	
55	0.66805	0.74412	0.89777	1.1139	1.3439	1.4969	0.25588	0.33195	5
56	.66826	-74392	.89830	.1132	.3442	.4964	.25608	.33173	4
57 58	.66848	.74373	.89882 .89935	.1126	.3446	.4959 .4954	.25627	.33152	3 2
50	.66891	.74353 .74334	.89988	.1113	-3453	.4934	.25666	.33138	í
59 60	0.66913	0.74314	0.90040	1,1106	1.3456	1.4945	0.25685	0.33087	ō
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

480

0 0.669(3) 0.74314 0.00010 1.1105 1.3456 1.4945 0.2588 0.33087 60 2.669(3) 7.4395 0.0003 1.100 3.460 4.940 2.2705 3.3065 59 3.366(9) 7.4325 0.0008 1.036 3.495 3.495 2.2704 3.3002 57 4.660(9) 7.4325 0.0008 1.036 3.495 3.495 2.2704 3.3002 57 6.0008 3.660(9) 7.4325 0.0008 1.036 3.495 3.495 2.2704 3.3002 57 6.0008 3.660(9) 7.4327 0.0008 1.1007 4.327 4.930 2.2763 3.3000 57 6 6.07013 7.197 0.0337 1.067 3.477 4.001 0.2580 3.3957 58 6.07013 7.197 0.0337 1.067 3.497 4.091 0.2580 3.3957 58 8.67056 7.4128 0.0010 1.061 3.485 4.006 2.2842 3.3936 53 0.0010 1.061 3.485 4.006 2.2842 3.3936 53 0.0010 1.061 3.485 4.006 2.2842 3.3936 53 0.0010 1.061 3.485 4.006 2.2842 3.3936 53 0.0010 1.061 3.485 4.006 2.2841 3.3914 52 0.0061 1.061 3.485 4.006 2.2841 3.3914 52 0.0061 1.061 3.485 4.006 2.2841 3.3914 52 0.0061 1.061 3.485 4.006 2.2841 3.3914 53 0.0061 1.061 3.485 4.006 2.2841 3.3914 53 0.0061 1.061 3.395 4.8892 2.2500 3.3889 51 0.0061 1.0061 0.0061 1.038 3.488 4.001 2.2861 3.3889 51 0.0061 1.0061 0.0061 1.038 3.499 4.006 2.2841 3.3914 52 0.0061 1.035 3.499 4.887 2.2500 3.3889 49 11 0.00712 0.74061 0.0072 1.022 3.302 4.882 2.2500 3.3889 49 11 0.0072 1.0061 0.0072 1.002 3.302 4.885 2.2509 3.3886 47 11 0.0072 1.0000 0.0061 1.038 3.199 4.887 2.2500 3.3889 49 11 0.0072 1.0000 0.0061 1.038 3.199 4.887 2.2500 3.3889 49 11 0.0072 1.0000 0.0061 1.0000 1.3000 1.4873 0.25078 0.3276 45 10 0.0072 1.0000 0.0000 1.0000 1.3000 1.4873 0.25078 0.3276 47 11 0.0000 0.0000 1.0000 1.0000 1.3000 1.4873 0.25078 0.3276 45 10 0.0000 0.0000 1.0000 1.3000 1.4873 0.25078 0.3276 45 10 0.0000 0.0000 1.0000 1.3000 1.4873 0.25078 0.3276 47 10 0.0000 0.0000 1.0000 1.3000 1.4873 0.25078 0.3276 45 10 0.0000 0.0000 0.0000 1.4873 0.0000 0.	N	1 9	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	M
1	_	_ -	66012	0.74314	0.00040	7 1106	T 2456	T 4045	0.05685	0.22087	
2											
3		2 1	66956		.00146		3463	.4935			58
4 .666999 .74236 .99251 .1080 .3470 .4925 .25763 .33000 56 5 0.67021 0.74177 0.99367 .1067 .3477 .4916 .25802 .32957 54 7 0.67064 7.4178 .99402 .1067 .3477 .4916 .25802 .32957 54 8 0.67086 .74158 .99403 .1067 .3477 .4916 .25802 .32957 54 8 0.67086 .74158 .99403 .1054 .3488 .4906 .25841 .32914 52 9 0.67107 .74199 .99588 .1054 .3488 .4906 .25861 .32833 51 10 0.67129 0.74119 0.99588 .1014 .3492 1.4897 0.25880 0.32871 50 11 0.67130 .74100 .90521 .1035 .3495 .4892 .25909 .32819 49 12 0.67130 .74100 .90621 .1035 .3495 .4892 .25909 .32819 49 13 0.67191 .74061 .90727 .1022 .3802 .4882 .25919 .32868 .47 13 0.67191 .74061 .90727 .1022 .3802 .4882 .25919 .32868 .47 13 0.67237 .74062 .90887 .1003 .3351 .4868 .25998 .32742 .48 14 0.67215 .74041 .90780 .10380 .14873 .25998 .32742 .48											
S 0.67021 0.74217 0.99304 1.1074 1.3474 1.4921 0.25783 0.33979 55 7 6.67043 7.4179 9.9357 1.061 3.481 .4916 .25822 3.3936 53 8 6.67086 7.4158 9.9043 1.054 3.488 .4901 .25861 3.3935 53 10 0.67129 7.4110 .99651 1.018 3.488 .4901 .25861 3.3893 51 11 6.67129 7.4110 .99621 1.035 3.498 4.897 .22590 .3819 49 12 6.67129 7.4110 .99621 1.028 3.199 .4877 .22590 .3849 482 12 .67121 .74061 .99727 1.022 .3350 1.873 .25919 .32838 48 13 .67237 .74021 .99687 1.013 .3506 .4877 .22586 .32377 43 15 .67237 <td></td> <td>اله</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>56</td>		اله									56
7 .67066 .74178 .90410 .1061 .3481 .4906 .25841 .32914 52 9 .67107 .74139 .90515 1.018 .3488 .4906 .25841 .32914 52 10 .67129 .74100 .90568 1.1041 1.3492 1.4897 .25850 .32871 50 11 .67120 .74100 .90611 1.035 .3495 .4892 .25900 .32849 49 12 .67171 .74061 .90737 1.022 .3309 .4887 .25919 .328.8 48 13 .67191 .74061 .90737 1.022 .3506 .4877 .25959 .32763 45 15 .067237 .74022 .90831 1.003 1.3513 .4883 .29959 .32763 45 16 .67280 .73993 .90940 .9056 .3517 .4863 .25017 .27224 43 19 .07333	1 :	5 0				1.1074			0.25783		
9	1 (5 .	67043	.74197	.90357	.1067	.3477	.4916	.25802	.32957	54
9	1 '	7 .					3481		.25822		
10									.25841		
11											51
12											
13											49
14											
15											
16								1.4873	0.25078	0.32763	
17								.4868	25998		
18		7		.73983				.4863	.26017		43
20			.67301		.90993	.0990		.4858	.26037		
21 6.67366 .73984 .91153 .0971 .3531 .4844 .26096 .32613 38 22 6.7387 .73885 .91259 .0958 .3334 .4835 .26135 .32591 37 24 .67430 .73826 .91312 .0951 .3342 .4830 .26154 .32570 .36 25 .67431 .73826 .91361 .0945 1.3352 .4830 .26154 .32570 36 26 .67473 .73826 .91479 .0939 .3519 .4821 .26194 .32527 .34 27 .67495 .73767 .91580 .0916 .3556 .4811 .26233 .32484 32 29 .67537 .37378 .91637 .0913 1.3563 1.4802 .26233 .32462 31 31 .67850 .73768 .91687 .0907 .3567 .4497 .26292 .32441 30 32 .67602		9	.67323	-73943			.3524	.4854			
22 6.7387 .73885 .91259 .0958 .3334 .4839 .2615 .32613 38 23 6.7490 .73855 .91259 .0958 .3338 .4835 .26154 .32570 36 24 .67430 .73845 .91312 .0951 .3342 .4830 .26154 .32570 36 26 .67473 .73866 .91419 .9099 .3319 .4821 .26194 0.32584 32 27 .67495 .73787 .91473 .0912 .3556 .4811 .26231 .32505 33 28 .67516 .73778 .91526 .0926 .3556 .4811 .26233 .32462 31 30 .67539 .73728 .91687 .0907 .3567 .4797 .26292 .32419 29 31 .67620 .73689 .91687 .0907 .3567 .4797 .26311 .333369 .26121 .32332 .26131 .3233		0 0	.67344								
23 67409 .73855 .91329 .0958 .3538 .4835 .26135 .32501 37 .26 (6743) .73845 .91312 .0951 .3542 .4835 .26154 .32570 .36 .26 (7473) .366 .91366 1.9451 1.3545 1.4852 .26154 .32570 .36 .26 (7473) .3866 .91491 .9939 .3519 .4821 .26194 .32527 .34 .26 (1474) .32527 .34 .26 (1474) .32527 .34 .26 (1474) .26 (1474) .91580 .9096 .3556 .4811 .26213 .32462 .31 .32462 .31 .30 .67537 .73747 .91580 .9090 .3560 .4866 .26233 .32462 .31 .32 .67652 .73768 .91673 .0977 .3569 .4874 .26311 .32411 .30 .67622 .32441 .30 .32 .67602 .73688 .91740 .9000 .3571 .4792 .26311 .32377 .26				.73904							39
24 6.67430 -73836 -91312 .0951 .3542 .4830 .02154 .32570 36 25 0.67452 0.73836 0.91419 .0939 .3319 .4821 .26194 .32573 34 27 6.7495 .73767 .91473 .0932 .33552 .4816 .26213 .32525 33 28 .67516 .73767 .91526 .0926 .3556 .4811 .26233 .32484 32 29 .67537 .73728 .901631 .10913 1.3563 1.4802 .02672 .32484 32 31 .67680 .73768 .91687 .0907 .3567 .4797 .26292 .32419 29 32 .67622 .73689 .91847 .0894 .3374 .4788 .26311 .32398 28 33 .67623 .73649 .91901 .0884 .3578 .4792 .26311 .323352 26 .17369 .90901							•3534				
25 0.67452 0.73856 0.91459 1.0945 1.3545 1.4825 0.26174 0.32548 35 26 67473 .73866 .91419 .0939 .3519 .4821 .26194 .32527 34 27 .67495 .73787 .91473 .0932 .3555 .4816 .26213 .32505 33 28 .67516 .73767 .91580 .0916 .3356 .4866 .26233 .32462 31 30 .67537 .37378 .91687 .0907 .3567 .4970 .26292 .32441 30 31 .67602 .73688 .91740 .0907 .3567 .4979 .26292 .32411 29 33 .67623 .73649 .91687 .0907 .3567 .4979 .26311 .32398 28 33 .67628 .73649 .91951 .0888 .3578 .4783 .26311 .32377 .27 35 .67668											37
26 .67473 .73866 .91419 .0939 .3519 .4821 .26194 .32527 34 27 .67495 .73787 .91473 .0932 .3552 .4816 .26213 .32505 33 28 .67516 .73767 .91526 .0926 .3556 .4811 .26233 .32484 32 30 .67537 .73748 .91637 .0913 1.3563 1.4802 .02672 0,32441 30 31 .67680 .73768 .91687 .0907 .3567 .4797 .26292 .32441 30 32 .67621 .73689 .91740 .0900 .3571 .4792 .26331 .32398 28 33 .67645 .73649 .91847 .0884 .3574 .4788 .26331 .32377 27 35 .67668 .73649 .91955 .0875 .3385 .4774 .26391 .32334 25 35 .67666											30
27 6.7495 .73787 .91473 .9932 .3552 .4816 .26213 .32505 33 29 .67537 .73747 .91580 .0919 .3560 .4806 .26253 .32462 31 30 .67537 .73768 .91687 .0907 .3560 .4806 .26253 .32462 31 31 .67622 .73688 .91740 .0900 .3571 .4792 .26392 .32441 39 33 .67623 .73669 .91794 .0894 .3574 .4788 .26331 .32395 26 34 .67645 .73649 .91847 .0888 .3578 .4783 .26351 .32355 26 35 .67666 .733699 .91951 .0887 .3585 .4774 .26390 .32312 24 35 .67645 .73649 .91847 .0888 .3578 .4783 .26351 .32355 26 35 .676587				72806			2540				
28 6.7516 7.3767 9.1526 .0926 .3556 .4811 .26233 .32484 32 29 .67537 .73747 .91580 .0910 .3560 .4860 .26233 .32482 31 30 .67539 .73728 .91637 .0907 .3567 .4797 .26292 .32411 .33398 28 32 .67622 .73688 .91740 .0900 .3571 .4792 .2631 .32398 28 33 .67631 .73649 .91847 .0884 .3574 .4788 .26331 .32377 27 34 .67645 .73649 .91847 .0888 .3578 .4783 .26331 .32377 27 35 .67668 .73509 .91951 .0881 1.3381 1.4778 .26371 .32334 25 36 .6788 .73579 .73539 .92068 .0862 .3592 .4764 .26430 .32224 21				73787							
29 6.7537 7.3747 91580 .0919 .3560 .4806 2.6233 .32462 31 30 0.67559 0.73728 0.91633 1.0913 1.3563 1.4802 0.26272 0.32441 30 31 6.6780 7.3768 9.91687 0.907 .3567 .4797 2.6292 0.32441 29 33 6.67631 7.3669 9.91740 0.900 .3571 .4792 2.6331 .32395 28 34 6.67635 7.3669 9.91901 1.0881 1.3581 1.4778 2.6351 .32355 26 35 0.67668 7.3560 9.91951 1.0881 1.3581 1.4778 2.6331 .32355 26 35 0.67638 7.3560 9.91955 0.875 3.385 .4774 2.6390 .32312 24 36 6.67688 7.3560 9.92082 0.868 2.3592 .4764 .26439 .32292 23 38											
30					.01580	.0919	.3560				31
31 6.7880 .73768 .91740 .0907 .3567 .4797 .26292 .32419 29 32 .67602 .73688 .91740 .0900 .3571 .4792 .26311 .32398 28 33 .67635 .73669 .91794 .0894 .3574 .4788 .26331 .32377 27 35 .67665 .73629 .91901 .0881 1.3581 1.4778 .26331 .32377 .032334 25 36 .67688 .73509 .9008 .0868 3.389 .4769 .26410 .03291 23 37 .67709 .73570 .92062 .0862 .3592 .4764 .26430 .32292 23 38 .67732 .73551 .92116 .0856 .3506 .4760 .26449 .32248 21 40 .67816 .73391 .922271 .0843 .3603 .4750 .26489 .32227 20 41					0.91633	1.0913					
32 6,7602 .73688 9,1740 .0900 .3571 .4792 2,6311 .32398 28 33 .67623 .73669 .91794 .0884 .3574 .4788 .26331 .32357 27 34 .67645 .73649 .91847 .0888 .3578 .4783 .26351 .32355 26 35 .67668 .73610 .91955 .0875 .3585 .4774 .26390 .32312 24 37 .67790 .73500 .92062 .0868 .3589 .4769 .26410 .32291 23 38 .67732 .73551 .92161 .0856 .3596 .4760 .26449 .32248 21 40 .6.7737 .373511 .922170 1.0849 1.3600 1.4750 .26469 .32227 20 41 .67941 .73412 .922273 .0843 .3603 .44750 .26469 .322265 19 42 .67816 <td>3</td> <td></td> <td>.67580</td> <td>.73708</td> <td>.91687</td> <td>.0907</td> <td></td> <td>.4797</td> <td></td> <td></td> <td>29</td>	3		.67580	.73708	.91687	.0907		.4797			29
34 6.7615 .73629 .91847 .0888 .3578 .4783 .26351 .32355 26 35 0.67666 0.73629 0.91901 1.0881 1.3381 1.4778 0.26371 0.32334 25 36 .67688 .73510 .91955 .0875 .3385 .4774 .26390 .32312 24 37 .67709 .73570 .92062 .0868 .3389 .4764 .26439 .32291 23 39 .67752 .73531 .92116 .0856 .3596 .4760 .26469 .32292 22 40 .67773 .73531 .92170 1.0849 1.3600 1.4750 .26469 .32227 20 41 .67794 .73511 .92227 .0837 .3607 .4746 .26588 .32184 18 43 .67839 .73472 .922331 .0824 .3614 .4732 .26588 .32141 16 45 .67830<		2	.67602	. 73688				.4792			
35				73669		.0894					27
36 6.7688 .73610 .91955 .0875 .3385 .4774 .26390 .32312 24 37 .67709 .73590 .92008 .0868 .3589 .4769 .26410 .32291 23 38 .67732 .73550 .92062 .0862 .3592 .4764 .26430 .32269 22 39 .67752 .73531 .92170 .0856 .3596 .4760 .26449 .32248 21 40 .67773 .73351 .92170 .0849 1.3600 1.4755 .26489 .322237 20 41 .67816 .73491 .922277 .0837 .3607 .4746 .26588 .32184 18 43 .67837 .73472 .92331 .0830 .3611 .4741 .26528 .32161 16 45 .67880 .73432 .922385 .0824 .3614 .4736 .26588 .32104 16 45 .67901			.67645	.73649							
37 6.67709 .73590 .92058 .0868 .3389 .4769 .26410 .32291 23 38 6.67730 .73570 .92062 .0862 .3592 .4764 .26430 .32269 22 39 .67752 .73531 .92116 .0856 .3596 .4760 .26449 .32248 21 40 0.67730 0.73531 0.92170 1.0849 1.3600 1.4755 0.26469 0.32227 20 41 .67816 .73491 .92277 .0837 .3607 .4746 .26508 .32184 18 43 .67837 .73472 .92331 .0830 .3611 .4741 .26528 .32141 16 45 .07680 0.73432 .92493 .0824 .3614 .4736 .26548 .32141 16 45 .0.67830 .73412 .92493 .0812 .3622 .4727 .26588 .32141 16 45 .67944	3										
38 6.7730 .73570 .92662 .0862 .3592 .4764 .26430 .32269 22 40 0.67773 0.73531 0.92170 1.0849 1.3660 1.4755 0.26469 0.32248 21 41 .67974 .73511 9.92277 1.0849 1.3660 1.4755 0.26469 0.32227 20 42 .67816 .733491 .92277 .0837 .3667 .4746 .26588 .32184 18 43 .67837 .73452 .922351 .0824 .3611 .4741 .26528 .32163 17 45 0.67880 0.73432 0.92439 1.0818 1.3618 1.4732 0.26588 0.32120 15 46 .67901 .73412 .92493 1.0818 1.3628 1.4732 0.26587 .32008 14 47 .67923 .73333 .92601 .0799 .3629 .4718 .26627 .32056 12 49											
39 6.7752 .73531 .92116 .0856 .3566 .4760 .26419 .32248 21 40 0.67773 0.73531 0.92170 1.0849 1.3560 1.4756 0.26469 0.32227 20 41 .67794 .73511 .92223 .0843 .3603 .4750 .26489 .32205 19 42 .67816 .73491 .92277 .0837 .3607 .4746 .26508 .32184 18 43 .67839 .73472 .92331 .0830 .3611 .4741 .26528 .32184 18 45 0.67880 .73432 .92439 1.0818 1.3618 1.4741 .26568 .32141 16 46 .67991 .73412 .92493 .0812 .3622 .4727 .26568 .32208 14 47 .67923 .73333 .92547 .0805 .3625 .4723 .26667 .32076 12 49 .67965<	1 3	8									
1.0										32248	
41 .67794 .73511 .92223 .0843 .3603 .4750 .26489 .32205 19 42 .67816 .73491 .92277 .0837 .3607 .4746 .26568 .32184 18 43 .67837 .73472 .92331 .0830 .3611 .4741 .26528 .32161 17 44 .67859 .73432 .922439 .0818 1.3618 1.4736 .26548 .32141 16 45 .057830 .73412 .92493 .0818 1.3618 1.4736 .26587 .32008 14 46 .67901 .73412 .92493 .0812 .3622 .4727 .26587 .32008 14 47 .67923 .73393 .92517 .0799 .3622 .4727 .26687 .32008 14 48 .67947 .73333 .92655 .0793 .3633 .4713 .26647 .32034 11 50 .67987						T 0840	T 3600			0 32227	
42 6.7816 .73491 .92277 .0837 .3667 .4746 .26508 .32184 18 43 .67837 .73472 .92331 .0830 .3611 .4741 .26528 .32163 17 44 .67859 .73432 .92385 .0824 .3614 .4736 .26548 .32141 16 45 0.67850 0.73432 0.92493 .0812 .3622 .4727 .26586 0.32120 15 46 .67901 .733412 .92493 .0812 .3622 .4723 .26667 .32098 14 47 .67933 .73393 .92547 .0805 .3655 .4723 .26607 .32077 13 48 .67944 .73373 .92601 .0799 .3599 .4718 .26647 .32034 11 50 .057957 .733333 .92709 .10786 .13636 .14709 0.26667 .32034 11 51 .68008 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>3603</td> <td>4750</td> <td></td> <td></td> <td></td>							3603	4750			
43						.0837	3607			.32184	18
44											17
45 0.67880 0.73432 0.92439 1.0818 1.3618 1.3618 1.4732 0.26568 0.32120 15 46 0.67901 .73412 0.92493 0.6812 0.3622 4.727 0.26587 0.32008 14 47 0.67923 .73393 0.92547 0.885 0.3655 4.723 0.26667 0.32077 13 48 0.67944 0.73373 0.92601 0.799 0.3629 4.718 0.26627 0.32077 13 49 0.7965 0.33333 0.9255 0.793 0.3633 4.713 0.26627 0.32034 11 50 0.67987 0.73333 0.92709 1.0786 1.3636 1.4709 0.26666 0.32013 10 51 0.68028 0.73314 0.92763 0.778 0.3644 0.4704 0.26656 0.32013 10 52 0.68029 0.73294 0.92871 0.0767 0.3647 0.4699 0.26706 0.31992 9 52 0.68029 0.73294 0.92817 0.0767 0.3647 0.4699 0.26706 0.31992 9 53 0.68051 0.73274 0.92871 0.0767 0.3647 0.4690 0.26706 0.31992 9 54 0.68072 0.73254 0.9280 0.0761 0.3651 0.4690 0.26706 0.31992 6 55 0.68093 0.73234 0.92980 1.0755 1.3655 0.4690 0.26746 0.31928 6 55 0.68175 0.73175 0.9334 0.749 0.3658 0.4574 0.26656 0.31907 5 56 0.68175 0.73175 0.9334 0.749 0.3658 0.4574 0.26655 0.31907 5 57 0.68176 0.73175 0.9308 0.742 0.3662 0.4676 0.26825 0.31864 3 58 0.68178 0.73175 0.93143 0.736 0.3669 0.4667 0.26845 0.31821 1 60 0.6820 0.73135 0.93251 1.0724 1.3673 1.4663 0.26865 0.31800 0	4	4	.67859	.73452	.92385	.0824	.3614	.4736	.26548	.32141	
47 6.79.33 .73393 .92547 .080s .3625 .4723 .266c7 .32077 13 48 .679.14 .73373 .92601 .0799 .3629 .4718 .266c7 .32057 12 59 .67995 .73333 .92651 .0793 .3643 .4713 .266c7 .32034 11 50 .67997 0.73333 0.92709 1.0786 1.3536 1.4709 0.26666 0.32013 10 51 .68008 .73314 .929763 .0780 .3640 .4704 .26686 0.32013 10 52 .68029 .73274 .92871 .0774 .3644 .4699 .26766 .31907 8 53 .68071 .73274 .92871 .0767 .3647 .4690 .26766 .31949 7 54 .68072 .73215 .92926 .0761 .3651 .4690 .26746 .31928 6 55 .68015									0.26568		
48 6.7914 .73373 .92651 .0799 .3699 .4718 .26627 .32056 12 49 .67965 .73333 .92655 .0793 .3633 .4713 .26647 .32034 11 50 0.67987 .733333 .92709 1.0786 1.3536 1.4709 0.26666 0.32013 10 51 .68088 .73314 .92763 .0780 .3640 .4704 .26686 .31992 9 52 .68029 .73294 .92817 .0767 .3647 .4699 .26766 .31992 9 53 .68051 .73224 .92871 .0767 .3647 .4695 .26726 .31949 7 54 .68072 .73234 .92926 .07655 1.3651 1.4690 .26746 .31949 7 55 .68038 .73234 .92980 1.0755 1.3651 1.4690 .26755 .31897 5 56 .68136											
49 67965 ,73333 ,92655 ,0763 1,3636 1,4713 2,26647 ,32034 II 50 0,67987 0,733333 0,92709 1,0786 1,3636 1,4709 0,26666 0,32013 10 51 .68008 ,73314 ,92763 ,0780 ,3640 ,4704 ,26686 0,31992 9 52 .68029 ,73294 ,92871 ,0767 ,3641 ,4699 ,26766 ,31949 7 54 .68072 ,73254 ,92926 ,0761 ,3637 ,4695 ,26766 ,31949 7 55 0,68093 0,73234 0,92980 1,0755 1,3655 1,4690 ,26765 0,31928 6 57 .68175 ,73175 ,93088 ,0742 ,3662 ,4676 ,26855 ,31864 3 58 .68175 ,73175 ,93143 ,0736 ,3666 ,4672 ,26825 ,31843 2 59 .68178	4	7			.92547						
50 0.67987 0.73333 0.92760 1.0786 1.3636 1.4709 0.26666 0.32013 10 51 .68088 .73314 .92763 .0780 .3640 .4704 .26686 .31992 9 52 .68029 .73294 .92817 .0774 .3644 .4699 .26766 .31992 8 53 .68071 .73274 .92871 .0767 .3644 .4699 .26766 .31949 7 54 .68072 .73254 .92926 .0761 .3651 .4690 .26766 .31949 7 55 0.68093 .73234 .92980 1.0755 1.3655 1.4696 .26765 0.31907 5 56 .68115 .73195 .93034 .0749 .3658 .4681 .26785 .31885 4 57 .68136 .73175 .93143 .0736 .3666 .4672 .26885 .31843 2 59 .68178											
51 .68008 .73314 .92763 .0780 .3640 .4704 .26666 .31992 9 52 .68029 .73294 .92817 .0707 .3644 .4699 .26706 .31949 7 53 .68051 .73274 .92871 .0767 .3647 .4695 .26726 .31949 7 54 .68072 .73234 .92926 .0765 1.3651 .4690 .26746 .31928 6 55 .68033 .73234 .92926 .0755 1.3655 1.4660 .26765 .31907 5 56 .68115 .73215 .93034 .0749 .3658 .4681 .26785 .31885 4 57 .68136 .73175 .93143 .0736 .3666 .4672 .26825 .31843 2 59 .68178 .73155 .93197 .0730 .3669 .4667 .26845 .31821 1 60 .68200											
53 .68051 .73274 .92871 .0767 .3647 .4695 .26726 .31949 7 54 .68072 .73254 .92926 .0761 .3651 .4696 .26746 .31949 7 55 .08093 .73234 .92980 1.0755 1.3655 1.4686 0.26765 0.31907 5 56 .68115 .73155 .93034 .0749 .3668 .4631 .26785 .31865 4 57 .68136 .73175 .93183 .0742 .3666 .4672 .26895 .31864 3 59 .68178 .73155 .93197 .0730 .3669 .4667 .26845 .31821 1 60 0.6820 0.73135 0.93251 I.0724 I.3673 I.4663 0.26865 0.3180 0	1 3	7									
53 .68051 .73274 .92871 .0767 .3647 .4695 .26726 .31949 7 54 .68072 .73254 .92926 .0761 .3651 .4696 .26746 .31949 7 55 .08093 .73234 .92980 1.0755 1.3655 1.4686 0.26765 0.31907 5 56 .68115 .73155 .93034 .0749 .3668 .4631 .26785 .31865 4 57 .68136 .73175 .93183 .0742 .3666 .4672 .26895 .31864 3 59 .68178 .73155 .93197 .0730 .3669 .4667 .26845 .31821 1 60 0.6820 0.73135 0.93251 I.0724 I.3673 I.4663 0.26865 0.3180 0											8
54 .68072 .73254 .92926 .0761 .3651 .4690 .26746 .31928 6 55 0.68093 0.73234 0.92980 1.0755 1.3655 1.4686 0.26765 0.31907 5 56 .68175 .73215 .93034 .0749 .3658 .4681 .26785 3.31885 4 57 .68136 .73175 .93088 .0742 .3662 .4676 .26825 .31864 3 58 .68178 .73175 .93143 .0736 .3666 .4672 .26825 .31843 2 59 .68178 .73155 .93197 .0730 .3669 .4667 .26845 .31821 I 60 0.68200 0.73135 0.93251 I.0724 I.3673 I.4663 0.26865 0.31800 0											7
55 0.68093 0.73234 0.92980 1.0755 1.3655 1.4686 0.26765 0.31907 5 56 .68115 .73215 .93034 .0749 .3658 .4681 .26785 .31885 4 57 .68136 .73195 .93088 .0742 .3662 .4676 .26895 .31864 3 53 .68157 .73175 .93143 .07.36 .3666 .4672 .26825 .31843 2 59 .68178 .73155 .93197 .0730 .3669 .4667 .26835 .31821 1 60 0.6820 0.73135 0.93251 1.0724 1.3673 1.4663 0.26865 0.31800 0	1 5	14					3651	.4690		.31928	
56 .68115 .73215 .93034 .0749 .3658 .4651 .26785 .31885 4 57 .68136 .73195 .93088 .0742 .3662 .4676 .26895 .31864 3 58 .68157 .73175 .93143 .0736 .3666 .4672 .26825 .31843 2 59 .68178 .73155 .93197 .0730 .3669 .4667 .26845 .31821 1 60 0.68200 0.73135 0.93251 I.0724 I.3673 I.4663 0.26865 0.31800 0	1 3	5 0	.68093	0.73234			1.3655	1.4686	0.26765	0.31907	5
57 .68136 .73195 .93088 .0742 .3662 .4676 .26895 .31864 3 58 .68157 .73175 .93143 .0736 .3666 .4672 .26825 .31843 2 59 .68178 .73155 .93197 .0730 .3669 .4667 .26845 .31821 I 60 0.68200 0.73135 0.93251 I.0724 I.3673 I.4663 0.26865 0.31800 0	5	56			.93034	.0749	.3658	.4581			4
59 .68178 .73155 .93197 .0730 .3669 .4667 .26845 .31821 I 60 0.68200 0.73135 0.93251 I.0724 I.3673 I.4663 0.26865 0.31800 0		57					.3662				3
60 0.68200 0.73133 0.93251 1.0724 1.3673 1.4663 0.26865 0.31800 0	5	3									
	5	9									
M Cosine Sine Cotan. Tan. Cosec. Secant Vrs. Cos. Vrs. Sin. M	'	~ 3	.08200	0.73135	0.93251	1.0724	1.3073	1.4003	0.20865	0.31800	-
M Cosme Stile Cotan, Tan, Cosec, Secant Vis. Cos. Vis. Sin. M	-	M	`onine	Sina	Cotor	Ton	Cosse	Same	Ven Con	Vec Sie	M
	1 '	" "	201116	Sille	Colan.	1 1111	Cusec.	pecant	V15. COS	7 13. 0111.	141

132° 47°

430

1360

					,mean i	· www.ious			200
М	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.68200	0.73135	0.93251	1.0724	1.3673	1.4663	0.26865	0.31800	60
I	.68221	.73115	.93306	.0717	.3677	.4658	.26384	.31779	59
2	.68242	.73096	.93360	.0711	.3681	.4654	26904	.31758	58
3	.68261	.73076	93415	.0705	.3684	. 4649	.26924	.31736	57
5 6	.68285	.73056	.93469	.0699	.3688	.4644	.26944	.31715	56
5	0.68306 .68327	0.73036 .73016	0.93524	1.0692 .0686	1.3692	1.4640	0.26964	0.31694	55
7	.63349	.72996	.93578	.630	.3699	.4535 .4631	.26984	.31673	54 53
7 8	.63370	.72976	.93687	.0674	.3703	.4626	.27023	.31630	52
9	.68391	.72956	.93742	.0667	.3707	.4622	.27043	.31609	51
10	0.68412	0.72957	0.93797	1.0061	1.3710	1.4617	0.27063	0.31588	50
II	.68433	.72917	.93351	.0675	-3714	.4513	.27083	.31566	49
12	.68455	.72397	.93906	.0649	.3718	.4008	.27103	.31545	48
13	.63476	.72877 .72857	.93961	.0643 .0636	.3722	.4604	.27123	.31524	47 46
14	.63497 0.63513	0.72357	0.94016	1.0630	1.3729	.4509 1.4505	0.27163	.31503 0.31482	45
16	.63333	.72817	91125	.0624	.3733	.4520	.27183	.31460	44
17	.68561	.72797	.94180	.0618	-3737	.4536	.27203	.31439	43
18	.68582	.72777	94235	.0612	.3740	.4531	.27223	.31418	42
19	.68603	.72737	.94290	.0605	-3744	-4577	.27243	.31397	41
20	0.68621	0.72737	0.94345	1.0599	1.3748	1.4572	0.27263	0.31376	40
21	.68645	.72717	.94400	.0593	.3752	.4568	.27283	.31355	39
22	.68666	.72697 .72677	.94455	.0,537	.3756 .3759	.4563 .4559	.27302	.31333	38 37
24	.68703	.72657	.94565	.0575	.3763	.4554	.27342	.31312	36
25	0.68735	0.72637	0.91620	1.0538	1.3767	1.4550	0.27362	0.31270	35
26	.68751	.72617	.94675	.0552	.3771	.4545	.27382	.31249	34
27	.68772	.72397	.91731	.0336	-3774	.454T	.27402	.31228	33
28	.63793	.72377	.94786	0,550	.3778	.4536	.27422	.31207	32
29	.63814	.72537	.94841	.0544	.3782	.4532	.27412	.31186	31
30	0.68833	0.72537	0.94896	1.0538	1.3786	1.4527 .4523	0.27462	0.31164	30 20
32	.68878	.72497	.95007	.0525	.3794	.4518	.27503	.31122	28
33	.68899	72477	.95062	.0519	.3797	.4514	.27523	.31101	27
34	.63920	.72457	.95118	.0513	.3801	.4510	-27543	.31080	26
35	0.68941	0.72437	0.95173	1.0507	1.3805	1.4505	0.27563	0.31059	25
36	68962	.72417	.95229	.0501	.3809	.4501	.27583	.31038	24
37 38	.63983	.72397 .72377	.95284	.0495	.3816	.4496 .4492	.27603	.31017	23 22
39	.69025	.72377	95395	.0483	.3320	.4487	.27643	.30975	21
40	0.69016	0.72337	0.95451	1.0476	1.3824	1.4483	0.27663	0.30954	20
41	.69067	.72317	.95506	.0470	.3328	.4479	.27683	.30933	19
42	.69083	.72297	.95562	.0464	.3832	-4474	.27703	.30912	18
43	.69109	.72277	.95618	.0458	.3536	.4470	.27723	.30891	17
44	.69130 0.69151	.72255	.95673	1.0446	.3839 1.3843	.4465 1.4461	0.27764	0.30849	16
45 46	.69151	0.72236 .72216	0.95729 .95785	.0440	3847	·4457	27784	.30828	15 14
47	.69193	.72196	.95841	.64.34	.3851	·4452	.27804	.30807	13
48	.69214	.72176	95896	.0428	.3855	.4448	. 27824	.30786	12
49	.69235	.72156	.95952	.0422	.3859	.4443	. 27844	.30765	11
50	0.69256	0.72136	0.96008	1.0416	1.3863	1.4439	0.27864	0.30744	10
51	.69277	.72113	.96064	.0410	.3867	-4435	.27884	.30723	9
52 53	.69298	.72095	.96120	.0404	.3870	.4430	. 27904	.30702	
53	.69340	.72055	.96232	.0391	3878	.4422	.27945	.30660	7 6
55	0.69361	0.72035	0.96288	1.0385	1.3882	1.4417	0.27965	0.30639	5
56	.69392	.72015	.96314	.0379	.3886	.4413	.27985	.30618	4
57	.69103	.71991	96400	.0373	. 3890	.4408	.28005	.30597	3
58	.69424	.71974	.96456	.0367	.3894	.4404	.28026	.30576	2
59 60	.69445 0.69466	0.71954	0.96513	.0351	.3898 1.3902	1.4395	. 28046 0. 28066	0.30535	1 0
M	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

133*

460

И	Sine	Cosine	Tan.	Cotan.	Secant	Cosec.	Vrs. Sin.	Vrs. Cos.	М
0	0.69466	0.71934	0.96569	1.0355	1.3902	1.4395	0.28066	0.30534	60
I	.69437	.71914	.90025	.0349	.3905	.430I	.28036	.30513	
2	.69503	.71893	150001	.0343	.3909	.4337	.28106	.30492	59 58
3	.69528	.71373	.90738	.0337	.3913	.4332	.28127	.30471	57
	.69549	.71353	.96794	.0331	.3917	.4378	.28147	.30450	56
5 6	0.69570	0.71333	0.96350	1.0325	1.3921	1.4374	0.28167	0.30430	55
6	.69591	.71313	.96907	.0319	.3925	.4370	.23187	.30409	54
8	.69612	.71792	.96963	.0313	.3929	.4365	.28208	.30388	53
8	.69633	.71772	.97020	.0307	-3933	.436t	.23228	.30367	52
9	.69654	.71752	.97076	.0301	•3937	·4357	.23248	.30346	51
10	0.69675	0.71732	0.97133	1.0295	1.3941	1.4352	0.28263	0.30325	50
II	69696	.71711	.97139	.0239	-3945	.4348	.28239	.30304	49
12	.69716	.71691	.97246	.0233	-3949	+4344	.28309	.30283	48
13	.69737	.71671	.97302	.0277	•3953	.4339	.28329	.30263	47
14	.69753	.71650	.97359	.0271	.3957	•4335	.28349	.30242	46
15	0.69779	0.71630	0.97416	1.0065	1.3960	1.4331	0.28370	0.30221	45
16	.69300	.71610	.97472	.0259	.3964	.4327	.28330	.30200	44
17	.69321	.71589	.97529	.0253	.3958	.4322	28410	.30179	43
18	.69341	.71569	.97536	.0247	.3972	.4318	.28431	.30158	42
19	.69362	.71549	.97643	.0241	.3976	.4314	.29451	.30138	41
20	0.69833	0.71529	0.97700	1.0235	.3976 1.3980	1.4310	0.28471	0.30117	40
21	.69904	.71508	.97756	.0229	.3984	.4305	.28492	.30096	39
22	.69925	.71483	.97313	.0223	.3988	.4301	.28512	.30075	39 38
23	.69945	.71468	.97870	.0218	.3992	.4297	.28532	.30054	37
24	.69966	.71447	.97927	.0212	.3996	.4292	.28553	.30034	37 36
25	0.69937	0.71427	0.97984	1.0206	1,4000	1.4238	0.28573	0.30013	35
26	.70008	.71406	.93041	.0200	.4004	.4284	.28593	.29992	34
27	.70029	.71336	.93093	.0194	.4008	.4280	.28614	.29971	33
28	.70049	.71366	.98155	.0133	.4012	.4276	.28634	.29950	32
29	.70070	.71345	.98212	.0182	.4016	.4271	.28654	.29930	31
30	0.70091	0.71325	0.98270		1.4020	1.4267	0.28675	0.29909	30
31	.70112	.71305	.98327	.0170	.4024	.4263	.28695	.29888	29 28
32	.70132	.71284	.98384	.0164	.4028	.4259	.28716	.29867	
33	.70153	.71264	.98441	.0158	.4032	.4254	.28736	.29847	27
34	.70174	.71243	.98499	.0152	.4036	.4250	.28756	.29326	26
35 36	0.70194	0.71223	0.98556	1.0146	1.4040	1.4246	0.28777	0.29805	25
36	.70215	.71203	.98613	.0141	.4044	.4242	.28797	.29785	24
37 38	.70236	.71182	.98671	.0135	.4048	.4238	.28818	.29764	23
38	.70257	.71162	.98728	.0129	.4052	.4233	.28838	29743	22
39	.70277	.71141	.93786	.0123	.4056	.4229	.28359	.29722	21
40	0.70298	0.71121	0.93843	1.0117	1.4060	1.4225	0.28379	0.29702	20
41	.70319	.71100	.93901	.0111	.4065	.4221	.28399	.29681	19 18
42	.70339	.71080	.93958	.0105	.4069	.4217	.28920	.29660	18
43	.70360	.71059	.99016	.0099	.4073	.4212	.28940	.29640	17
44	.70331	.71039	.99073	.0093	.4077	.4208	.28961	.29619	16
45 46	0.70401	0.71013	0.99131	1.0038	1.4031	1.4204	0.28931	0.29598	15
40	.70432	.70998	.99189	.∞32	.4085	.4200	.29002	. 29578	14
47	.70443	.70977	.99246	.∞76	.4089	.4196	.29022	-29557	13
48	.70463	.70957	.99304	.∞70	.4093	.4192	.29043	. 29536	12
49	.70484	.70936	.99362	.0061	.4097	.4188	. 29063	. 29516	II.
50	0.70505	0.70916	0.99420	1.0058	1.4101	1.4183	0.29084	0.29495	10
51	.70525	.70895	.99478	.0052	.4105	.4179	.29104	.29475	9
52	.70546	.70875	.99536	.0047	.4109	.4175	.29125	.29454	8
53	.70566	.70854	.99593	.0041	.4113	.4171	.29145	. 29433	7 6
54	.70587	.70834	.99651	.0035	.4117	.4167	.29166	.29413	
55 56	0.70608	0.70813	0.99709	1.0029	1.4122	1.4163	0.29136	0.29392	5
50	.70628	.70793	.99767	.0023	.4126	.4159	.29207	. 29372	4
57 58	.70649	.70772	.99826	.0017	.4130	.4154	.29228	.29351	3
58	.70669	.70752	.99884	.0012	.4134	.4150	.29248	.29330	2
59 60	.70690	.70731	.99942	1,0000	.4138	.4146	.29269	.29310	1
00	0.70711	0.70711	1.00000	1,000	1.4142	I.4I42	0.29289	0.29289	0
М	Cosine	Sine	Cotan.	Tan.	Cosec.	Secant	Vrs. Cos.	Vrs. Sin.	М

134° 45°

Tables of Logarithms

N.	L.	0	I	2	3	4	5	6	7	8	9	P. P.
100	00	000	043	087	130	173	217	260	303	346	389	44 43 42
101		432	475	518	561	604	647	689	732	775	817	I 4.4 4.3 4.2
102		860	903	945	988	* 030	* 07 2	*115	*157	*199	*242	2 8.8 8.6 8.4
103	01	284	326	368	410	452	494	536	578	620	662	3 13.2 12.9 12.6
104		703	745	787	828	870	912	953	995	*036	* 078	4 17.6 17.2 16.8
105	02	119	160	202	243	284	325	366	407	449	490	5 22.0 21.5 21.0
106		5 3 I	572	612	653	694	735	776	816	857	898	6 26.4 25.8 25.2
107		938	979	*019	*060	*100	*141	*181	*222	*2 62	* 3 0 2	7 30.8 30.T 29.4
108	03	342	383	423	463	503	543	583	623	663	703	8 35.2 34.4 33.6
109		743	782	822	862	902	941	981	*O2I	*060	*100	9 39.6 38.7 37.8
110	0.4	139	179	218	258	297	336	376	415	454	493	41 40 39
111		532	571	610	650	689	727	766	805	844	883	1 4.1 4.0 3.9
112		922	961	999	* 038	* 077	*115	*154	*192	*23I	* 269	2 8.2 8.0 7.8
113	05	308	346	385	423	461	500	538	576	614	652	3 12.3 12.0 11.7
114		690	729	767	805	843	881	918	956	994	*032	4 16.4 16.0 15.6
115	06	070	108	145	183	221	258	296	333	371	408	5 20.5 20.0 19.5
116		446	483	521	558	595	633	670	707	744	781	6 24.6 24.0 23.4
117		819	856	893	930	967	* 004	*04I	*0 78	*115	*151	7 28.7 28.0 27.3
118	07	188	225	262	298	335	372	408	445	482	518	8 32.8 32.0 31.2
119		555	591	628	664	700	737	773	809	846	882	9 36.9 36.0 35.1
120		918	954	990	*027		* 099		*17I		*243	38 37 36
121	80	279	314	350	386	422	458	493	529	565	600	1 3.8 3.7 3.6
122		636	672	707	743	778	814	849	884	920	955	2 7.6 7.4 7.2
123		991	* 026					* 202				3 11.4 11.1 10.8
124	09	342	377	412	447	482	517	552	587	621	656	4 15.2 14.8 14.4
125		691	726	760	795	830	864	899	934	-	*003	5 19.0 18.5 18.0
	10	037	072	106	140	175	209	243	278	312	346	6 22.8 22.2 21.6
127		380	415	449	483	517	551	585	619	653	687	7 26.6 25.9 25.2
128		721	755	789	823	857	890	924	958	992		8 30.4 29.6 28.8
129	11		093	126	160	193	227	261	294	327	361	9 34.2 33.3 32.4
130		394	428	461	494	528	561	594	628	66 r	694	35 34. 33
131		727	760	793	826	860	893	926	959	992	- 1	1 3.5 3.4 3.3
132	I 2		090	123	156	189	222	254	287	320	352	2 7.0 6.8 6.6
133		385	418	450	483	516	548	581	613	646	678	3 10.5 10.2 9.9
134		710	743	775	808	840	872	905	937	969	*00I	4 14.0 13.6 13.2
135	13		066	098	130	162	194	226	258	290	322	5 17.5 17.0 16.5
136		354	386	418	450	481	513	545 862	577	609	640	6 21.0 20.4 19.8
137		672 988	704	735	767	799	830		893	925	956	7 24.5 23.8 23.1
138		•	-	*051 364	*082			*176 489			*270 582	8 28.0 27.2 26.4
139	14	613	333	675	395 706	426	457 768	799	520 829	551 860	891	9.31.5 30.6 29.7
140		922	644	983	*OI4	737		799 *106		*168	*198	32 31 30
141		229	953	290	320		38I	412	*137 442		503	1 3.2 3.1 3.0
143	45	-	259 564	594	625	351 655	685	715	746	473 776	806	2 6.4 6.2 6.0
143		534 836	866	897	927	957			*O47		*107	3 9.6 9.3 9.0
144	16	137	167	197	227	256	286	316	346	376	406	4 12.8 12.4 12.0
146	10	435	465	495	524	554	584	613	643	673	702	5 16.0 15.5 15.0
147		732	761	791	820	850	879	909	938	967	997	6 19.2 18.6 18.0
148	17	026	056	085	114	143	173	202	231	260	289	7 22.4 21.7 21.0
149	- /	319	348	377	406	435	464	493	522	551	580	8 25.6 24.8 24.0
150		009	638	667	696	725	754	782	811	840	869	9 28.8 27.9 27.0
- 20			-530	557	- 290	123	134	102	V11	545	559	2 1 1 1 1 1 2 1 1 4

Tables of Logarithms

N.	L.	0	I	2	3	4	5	6	7	8	9	P. 1	P.
150	17	609	638	667	696	725	754	782	811	840	869	29	28
151	-/	898	926	955	984	*OI3	*04I	*070		*127	*156	1 2.9	2.8
152	τ8.	184	213	241	270	298	327	355	384	412	441	2 5.8	5.6
153	10	469	498	526	554	583	611	639	667	696	724	3 8.7	8.4
154		752	780	808	837	865	893	921	949	977		4 11.6	11.2
155	τ0	033	061	089	117	145	173	201	229	257	285	5 14.5	14.0
156	19	312	340	368	396	424	451	479	507	535	562	6 17.4	16.8
157		590	618	645	673	700	728	756	783	811	838	7 20.3	19.6
158		866	893	921	948	976	*003				*112	8 23.2	22.4
159	20	140	167	194	222	249	276	303	330	358	385	9 26.1	25.2
160		412	439	466	493	520	548	575	602	629	656	27	26
161		683	710	737	763	790	817	844	871	898	925	1 2.7	2.6
162		952	978	*005	* 032	* 059		*I12	*139		*192	2 5.4	5.2
163	21	219	245	272	299	325	352	378	405	431	458	3 8. I	7.8
164		484	511	537	564	590	617	64.3	669	696	722	4 10.8	10.4
165		748	775	801	827	854	880	906	932	958	985	5 13.5	13.0
166	22	011	037	063	089	115	141	167	194	220	246	6 16.2	15.6
167		272	298	324	350	376	401	427	453	479	505	7 18.9	18.2
168		531	557	583	608	634	660	686	712	737	763	8 21.6	20.8
169		789	814	840	866	891	917	943	968	994	1	9 24.3	23.4
170	23	045	070	096	121	147	172	198	223	249	274		
171	-5	300	325	350	376	401	426	452	477	502	528		5
172		553	578	603	629	654	679	704	729	754	779		.5
173		805	830	855	880	905	930	955		*005	*030	-	.0
174	21	055	080	105	130	155	180	204	229	254	279		.5
175		304	329	353	378	403	428	452	477	502	527	4 10	
176		551	576	601	625	650	674	699	724	748	773	5 12	
177		797	822	846	871	895	920	944	969	993	*018	1 -	
178	25	042	066	091	115	139	164	188	212	237	261	7 17	-
179	-3	285	310	334	358	382	406	431	455	479	503		.0
180	ĺ	527	551	575	600	624	648	672	696	720	744	9 22	-
181		768	792	816	840	864	888	912	935	959	983	24.	23
182	26	007	031	055	079	102	126	150	174	198	221	1 2.4	2.3
183		245	269	293	316	340	364	387	411	435	458	2 4.8	4.6
184		482	505	529	553	576	600	623	647	670	694	3 7.2	6.9
185		717	741	764	788	811	834	858	881	905	928	4 9.6	9.2
186		951	975	998	*O2I	* 045	*068	*09 I	* 114	*138	*161	5 12.0	11.5
187	27	184	207	231	254	277	300	323	346	370	393	6 14.4	13.8
188		416	439	462	485	508	531	554	577	600	623	7 16.8	16.1
189		646	669	692	715	738	761	784	807	830	852	8 19.2	18.4
190		875	898	921	944	967	989	*OI2	*035	* 058	*081	9 21.6	20.7
191	28	103	126	149	171	194	217	240	262	285	307	. 22	21
192		330	353	375	398	421	443	466	488	511	533	1 2.2	2. I
193		556	578	601	623	646	668	691	713	735	758	2 4.4	4.2
194		780	803	825	847	870	892	914	937	959	981	3 6.6	6.3
195	29	003	026	048	070	092	115	137	159	181	203	4 8.8	8.4
196	_	226	248	270	292	314	336	358	380	403	425	5 11.0	10.5
197		447	469	491	513	535	557	579	601	623	645	6 13.2	12.6
198		667	688	710	732	754	776	798	820	842	863	7 15.4	14.7
199		\$ 85	907	929	951	973	994	*016	* 038	* обо	*081	8 17.6	16.8
200	30	103	125	146	168	190	211	233	255	276	298	9 19.8	18.9

Tables of Logarithms

N.	L.	0	1	2	3	4	5	6	7	8	9	P. :	P.
200	30	103	125	146	168	190	211	233	255	276	298	22	21
201		320	341	363	384	406	428	449	471	492	514	1 2.2	2.1
202		535	557	578	600	621	643	664	685	707	728	2 4.4	4.2
203		750	771	792	814	835	856	878	899	920	942	3 6.6	6.3
204		963		*006					* 112		*I54	4 8.8	8.4
205	31	175	197	218	239	260	281	302	323	345	366	5 11.0	10.5
206	ľ	387	408	429	450	471	492	513	534	555	576	6 13.2	12.6
207		597	618	639	660	68 ı	702	723	744	765	785	7 15.4	14.7
208		806	827	848	869	890	911	931	952	973	994	8 17.6	16.8
209	32	015	035	056	077	0 98	118	139	160	181	201	9 19.8	18.9
210	*	222	243	263	284	305	325	346	366	387	408		•
211		428	449	469	490	510	531	552	572	593	613		. 0
212		634	654	675	695	715	736	756	777	797	818		. 0
213		838	858	879	899	919	940	960		*00I			.0
214	33	041	062	082	102	122	143	163	183	203	224		.0
215		244	264	284	304	325	345	365	385	405	425	5 10	
216		445	465	486	506	526	546	566	586	606	626	6 12	
217		646	666	686	706	726	746	766	786	806	826	7 14	
218		846	866	885	905	925	945	965	985	*005	* 025	8 16	
219	34	044	064	084	104	124	143	163	183	203	223	9 18	
220	٠.	242	262	282	301	321	341	361	380	400	420		
221		439	459	479	498	518	537	557	577	596	616		9 .9
222		635	655	674	694	713	733	753	772	792	811		
223		830	850	869	889	908	928	947	967	986	*005		.8
224	35	025	044	064	083	102	122	141	160	180	199		.7
225	-	218	238	257	276	295	315	334	353	372	392		.6
226		411	430	449	468	488	507	526	545	564	583	6 11	
227		603	622	641	660	679	698	717	736	755	774	7 13	
228		793	813	832	851	870	889	908	927	946	965	8 15	.3
229			* 003	*02I	* 040	* 059	*078	* 097	* 116	* 135	* 154	9 17	
230	36	173	192	211	229	248	267	286	305	324	342		
231		361	380	399	418	436	455	474	493	511	530		8
232		549	568	586	605	624	642	66 r	680	698	717		.8
233		736	754	773	791	810	829	847	866	884	903		.6
234		922	940	959	977	996	* 014	* 033	*05I	*070	*088		.4
235	37	107	125	144	162	181	199	218	236	254	273		. 2
236		291	310	328	346	365	383	401	420	438	457		.0
237		475	493	511	530	548	566	585	603	621	639	6 10 7 12	
238		658	676	694	712	73 I	749	767	785	8 0 3	822		
239		840	858	876	894	912	931	949	967	985	*003	8 14 9 16	
240	38	O2 I	039	057	075	0 93	112	130	148	166	184		
241	1	202	220	238	256	274	292	310	328	346	364	- 1	7
242		382	399	417	435	453	471	489	507	52 5	543		- 7
243		56 1	578	596	614	632	650	668	686	703	721		- 4
244		739	757	775	792	810	828	846	863	88 I	899		.I
245		917	934	952	970	987				* 058			.8
246	39	0 94	111	129	146	164	182	199	217	235	252		٠5
247		270	287	305	322	340	358	375	393	410	428	6 10	
248		445	463	480	498	515	533	550	568	585	602	7 11	- 1
249		620	637	655	672	690	707	724	742	759	777	8 13	
250		794	811	829	846	863	881	898	915	933	950	9 15	.3

Tables of Logarithms

N.	L.	. 0	1	2	3	4	5	6	7	8	9	P. P.
250		794	811	829	846	863	881	898	915	933	950	18
251	0,5	967		*002	*0 19	* 037		*07I			*123	1 1.8
252	40	140	157	175	192	209	226	243	261	278	295	2 3.6
253		312	329	346	364	381	398	415	432	449	466	3 5.4
254		483	500	518	535	552	569	586	603	620	637	4 7.2
255		654	671	688	705	722	739	756	773	790	807	5 9.0
256		824	841	858	875	892	909	926	943	960	976	6 10.8
257			#O10			*061	* 078		*111			7 12.6
258	41	162	179	196	212	229	246	263	280	296	313	8 14.4
259	•	330	347	363	380	397	414	430	447	464	481	9 16.2
260		497	514	531	547	564	581	597	614	631	647	17
261		664	681	697	714	731	747	764	780	797	814	1 1.7
262		830	847	863	880	896	913	929	946	963	979	2 3.4
263				*0 29	* 045	*062		*0 95		*127	*144	3 .5.1
264	42	160	177	193	210	226	243	259	15	292	308	4 6.8
265		325	341	357	374	390	406	423	439	455	472	5 8.5
266		488	504	521	537	553	570	586	602	619	635	6 10.2
267		651	667	684	700	716	732	749	765	781	797	7 11.9
268		813	830	846	862	878	894	911	927	943	959	8 13.6
269		975	991	*008	*024			* 072	*088	*104		9 15.3
270	43	136	152	169	185	201	217	233	249	265	281	16
271		297	313	329	345	36 I	377	393	409	425	441	1 1.6
272		457	473	489	505	521	537	553	569	584	600	
273		616	632	648	664	680	696	712	727	743	759	2 3.2 3 4.8
274		775	791	807	823	838	854	870	886	902	917	4 6.4
275		933	949	965	981	996	*OI2	*O28	*044	*059	*075	5 8.0
276	44	091	107	122	138	154	170	185	201	217	232	6 9.6
277		248	264	279	295	311	326	342	358	373	389	7 11.2
278		404	420	436	451	467	483	498	514	529	545	8 12.8
279		560	576	592	607	623	638	654	669	685	700	9 14.4
280		716	731	747	762	778	793	809	824	840	855	
281		871	886	902	917	932	948	963	979	994	*010	15
282	45	025	040	056	071	0 86	102	117	133	148	163	1 1.5
283		179	194	209	225	240	255	27I	286	301	317	2 3.0
284		332	347	362	378	39 3	408	423	439	454	469	3 4.5
285		484	5∞	515	530	545	561	576	591	606	621	4 6.0
286		637	652	667	682	697	712	7 28	743	758	773	5 7·5 6 9.0
287		788	803	818	834	849	864	879	894	909	924	1 5
288		939	954	969	984	*000		*030	* 045	*060	* 075	7 10.5 8 12.0
289	46	090	105	120	135	150	165	180	195	210	225	
290		240	255	270	285	300	315	330	345	359	374	9 13.5
291		389	404	419	434	449	464	479	494	509	523	14
292		538	553	568	583	598	613	627	642	657	672	1 1.4
293		687	702	716	731	746	761	776	790	805	820	2 2.8
294		835	850	864	879	894	909	923	938	953	967	3 4.2
295		982	997	*Q12	*0 26		* 056	*070	*0 85			4 5.6
296	47		144	159	173	188	202	217	232	245	261	5 7.0 6 8.4
297		276	290	305	319	334	349	3 63	378		407	1
298		422	436	451	465	480	494		524			
299		567	582	596	611	625	640	654	669			
300		712	727	741	756	770	784	799	813	828	842	9 12.6

Tables of Logarithms

N.	L	. 0	I	2	3	4	5	6	7	8	9	F. P.
300	47	712	727	741	756	770	784	799	Sız	828	842	
301		857	871	885	900	914	929	943	958	972	986	
302	48	001	015	029	044	058	073	087	101	116	130	
303		144	159	173	187	202	216	230	244	259	273	15
304		287	302	316	330	344	359	373	387	401	416	1 1.5
305		430	444	458	473	487	501	515	530	544	558	2 3.0
306		572	586	601	615	629	643	657	671	686	700	3 4.5
307		714	728	742	756	770	785	799	813	827	841	4 6.0
308		855	869	883	897	911	926	940	954	968	982	5 7.5
309		996	*010	* 024	*038	* 052	*066	*0 80	* 094	*108	*I22	6 9.0
310	49	136	150	164	178	192	206	220	234	248	262	7 10.5
311		276	290	304	318	332	346	360	374	388	402	8 12.0
312		415	429	443	457	47 I	485	499	513	527	541	9 13.5
313		554	568	582	596	610	624	638	651	665	679	., .
314		693	707	721	734	748	762	776	790	803	817	
315		831	845	859	872	886	900	914	927	941	955	.14
316		969	982	996	*010	*024	* 037	*05I	*065	* 079	*0 92	I I.4
317	50	106	120	133	147	161	174	188	202	215	229	2 2.8
318		243	256	270	284	297	311	325	338	352	365	3 4.2
319		379	393	406	420	433	447	461	474	488	501	4 5.6
320		515	529	542	556	569	583	596	610	623	637	5 7.0
321		651	664	678	691	705	718	732	745	759	772	6 8.4
322		786	799	813	826	840	853	866	880	893	907	7 9.8
323		920	934	947	961	974	987	*001	* 014	* 028	*041	8 11.2
324	51	055	o68	081	095	108	121	135	148	162	175	9 12.6
325		188	202	215	228	242	255	268	282	295	308	
326		322	335	348	362	375	388	402	415	428	441	13
327 -		455	468	481	495	508	521	534	548	561	574	1 1.3
328		587	601	614	627	640	654	667	680	693	706	2 2.6
329		720	733	746	759	772	786	799	812	825	838	
330		851	865	878	891	904	917	930	943	957	970	3 3.9 4 5.2
331		983	996	*009	* 022	* 035	* 048	*0 61	* 075	* 088	*101	5 6.5
332	52	114	127	140	153	166	179	192	205	218	231	6 7.8
333		244	257	270	284	297	310	323	336	349	362	7 9.1
334		375	388	401	414	427	440	453	466	479	492	8 10.4
335		504	517	530	543	556	569	582	595	608	621	9 11.7
336		634	647	660	673	686	699	711	724	737	750	5,,
337		763	776	789	802	815	827	840	853	866	879	
338		892	905	917	930	943	956	969	982	994		12
339	53	020	033	046	058	07 I	084	097	110	122	135	1 1.2
340		148	161	173	186	199	212	224	237	250	263	2 2.4
341		275	288	301	314	326	339	352	364	377	390	3 3.6
342		403	415	428	441	453	466	479	491	504	517	4 4.8
343		529	542	555	567	580	593	605	618	631	643	5 6.0
344		656	668	681	694	706	719	732	744	757	769	6 7.2
345		782	794	807	820	832	845	857	870	882	895	7 8.4
346		908	920	933	945	958	970	983		* 008	1	8 9.6
347	54	033	045	058	070	083	095	108	120	133	145	9 10.8
348		158	170	183	195	208	220	233	245	258	270	
349		283	295	307	320	332	345	357	370	382	394	
350		407	419	432	444	456	469	481	494	506	518	

00=1.549708

Tables of Logarithms

						ables C	JI LAIS		13			
N.	L	. 0	1	2	3	4	5	6	7	8	9	P. P.
350	54	407	419	432	444	456	469	481	494	506	518	
351		531	543	555	568	580	593	605	617	630	642	,
352		654	667	679	691	704	716	728	74I	753	765	
353		777	790	802	814	827	839	851	864	876	888	13
354		900	913	925	937	949	962	974	986		*011	1 1.3
355	55	023	035	047	060	072	084	0 96	108	121	133	2 2.6
356		145	157	169	182	194	206	218	230	242	255	3 3.9
357		267	279	291	303	315	328	340	352	364	376	4 5.2
358		388	400	413	425	437	449	46 1	473	485	497	
359		509	522	534	546	558	570	582	594	606	618	5 6.5 6 7.8
360		630	642	654	666	678	691	703	715	727	739	7 9.1
361		75I	763	775	787	799	811	823	835	847	859	8 10.4
362		871	883	895	907	919	931	943	955	967	979	9 11.7
363		991	*003	*015	* 027	* 038	*050	* 062	* 974	* 086	* 098	
364	56	110	122	134	146	158	170	182	194	205	217	
365		229	241	253	265	277	289	301	312	324	336	12
366		348	360	372	384	396	407	419	431	443	455	1 1.2
367		467	478	490	502	514	526	538	549	561	573	2 2.4
368		585	597	608	620	632	644	656	667	679	691	3 3.6
369		703	714	726	738	750	761	773	785	797	808	4 4.8
370		820	832	844	855	867	879	891	902	914	926	5 6.0
371		937	949	961	972	984				*03I		6 7.2
372	57	054	066	078	089	101	113	124	136	148	159	7 8.4
373	٠.	171	183	194	206	217	229	241	252	264	276	8 9.6
374		287	299	310	322	334	345	357	368	380	392	9 10.8
375		403	415	426	438	449	461	473	484	496	507	
376		519	530	542	553	565	576	588	600	611	623	11
377		634	646	657	669	680	692	703	715	726	738	
378		749	761	772	784	795	807	818	830	841	852	1 1.1
379		864	875	887	898	910	921	933	944	955	967	2 2.2
380		978			*013	-	1 -	*047		*070	*081	3 3.3
381	5 8	092	104	115	127	138	149	161	172	184	195	4 4.4
382	30	206	218	229	240	252	263	274	286	297	309	5 5.5
383		320	331	343	354	365	377	388	399	410	422	6 6.6
384		433	444	456	467	478	490	501	512	524	535	7 7.7
385		546	557	569	580	591	602	614	625	636	647	8 8.8
386		659	670	681	692	704	715	726	737	749	760	9 9.9
387		771	782	794	805	816	827	838	850	861	872	
388		883	894	906	917	928	939	950	961	973	984	10
389		995	*006	*017		*040	* 051			*084	*095	1 1.0
390	50	106	118	129	140	151	162	173	184	195	207	2 2.0
391	39	218	229	240	251	262	273	284	295	306	318	3 3.0
392		329	340	351	362	373	384	395	406	417	428	4 4.0
393		439	450	461	472	483	494	506	517	528	5 39	5 5.0
393		550	561	572	583	594	605	616	627	638	649	6 6.0
394		660	-	682	693	704	715	726	737	748	759	7 7.0
		770		791	802	813	824	835	846	857	868	8 8.0
396		879	890	901	912	923	934	945	956	966	977	
397 398		988	999		*O2I	*O32		*054		*0 76		9 9.0
	60	097	108	119	130	141	152	163	¥005	184	195	
399	00	206	217	228			260	271	282	293		
400	1	200	217	440	239	249	1 200	2/1	202	493	304	1

Tables of Logarithms

N.	L.		1	2	3	4	5	6	7	8	9	P. P.
400	60	206	217	228	239	249	260	271	282	293	304	
401		314	325	336	347	358	369	379	390	401	412	
402	Ì	423	433	444	455	466	477	487	498	509		
403		531	541	552	563	574	584	595	606	617	627	
404		638	649	660	670	681	692	703	713	724	735	
405		746	756	767	778	788	799	810	821	831	842	
406		853	863	874	885	895	906	917	927	938	949	11
407	١.	959	970	981		* 002	*013	*023	*034	*045	*055	11.1
408	61	o 66	077	087	0 98	109	119	130	140	151	162	2 2.2
409		172	183	194	204	215	225	236	247	257	268	3 3 - 3
410		278	289	300	310	321	331	342	352	363	374	4 4 . 4
411		384	395	405	416	426	437	448	458	469	479	5 5 - 5
412		490	500	511	521	532	542	553	563	574	584	66.6
413		595	606	616	627	637	648	658	669	679	690	1 1111
414		700	711	721	731	742	752	763	773	784	794	8 8.8
415		805	815	826	836	847	857	868	878	888	899	99.9
416	60	909 014	920	930	941	951	962	972 076	982 0 86		*003	
417	0.2	118	024	034 138	045 149	055 159	170	180	190	097 201	211	
419		221	232	242	252	263	273	284	294	304	315	
420		325	335	346	356	366	377	387	397	408	418	
421		428	439	449	459	469	480	490	500	511	521	10
422		531	542	552	562	572	583	593	603	613	624	1 1.0
423		634	644	655	665	675	685	696	706	716	726	2 2.0
424		737	747	757	767	778	788	798	808	818	829	3 3.0
425		839	849	859	870	885	890	900	910	921	931	4 4.0
426		941	951	961	972	982	992	* 002	* 012	* 022		5 5.0
427	63	043	053	063	073	083	094	104	114	124	134	66.0
428		144	155	165	175	185	195	205	215	225	236	7 7.0 8 8.0
429		246	256	266	276	286	296	306	317	327	337	99.0
430		347	357	367	377	387	397	407	417	428	438	919.0
431		448	458	468	478	488	498	508	518	528	538	
432		548	558	568	579	589	599	609	619	629	639	
433		649	659	669	679	689	699	709	719	729	739	
434		749	759	769	779	789	799	809	819	829	839	9
435		849	859	869	879	889	899	909	919	929	939	10.9
436	6.	949	959	969 0 68	979	988 088		800*	118	*028 128		2 1.8
437	04	048	058 157	167	078 177	187	098 197	207	217	227	137 237	3 2.7
439		246	256	266	276	286	296	306	316	326	335	4 3.6
440		345	355	365	375	385	395	404	414	424	434	5 4 . 5
441		444	454	464	473	483	493	503	513	523	532	6 5.4
442		542	552	562	572	582	591	601	611	621	631	76.3
443		640	650	660	670	680	689	699	709	719	729	8 7.2
444		738	748	7.58	768	777	787	797	807	816	826	98.1
445		836	846	856	865	875	885	895	904	914	924	
446		933	943	953	963	972	982			#OII	#02I	
447	65	031	040	050	060	070	079	089	099	108	118	1
448	_	128	137	147	157	167	176	186	196	205	215	
449		225	234	244	254	263	273	283	292	302	312	
450		321	331	34I	350	36 0	369	379	389	398	408	

Tables of Logarithms

N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
450	65	321	331	34I	350	360	369	379	389	398	408	
451	-	418	427	437	447	456	466	475	485	495	504	
452		514	523	533	543	552	562	571	581	591	600	
453		610	619	629	639	648	-658	667	677	686	6 96	
454		706	715	725	734	744	753	763	772	782	792	
455		801	811	820	830	839	849	858	868	877	887	
456		896	906	916	925	935	944	954	963	973	982	
457			100*	*011				*049		*068		
458	66	087	096	106	115	124	134	143	153	162	172	2 2.0
459		181	191	200	210	219	229	238	247	257	266	0,0
460		276	285	295	304	314	323	332	342	351	361	4 4.0
461		370	380	389	398	408	417	427	436	445	455	5 5.0
462		464	474	483	492	502	511	521	530	539	549	66.0
463		558	567	577	586	596	605	614	624	633	642	7 7.0
464		652	661	671	680	689 783	699	708 801	717 811	727 820	736	
465 466		745	755 848	764 857	773 867	876	792 885	894	904	913	829 922	9 9.0
467		839 932	941	950	960	969	978	987		*006		
468	67	025	034	043	052	0 62	071	080	089	099	108	
469	0,	117	127	136	145	154	164	173	182	191	201	
470		210	219	228	237	247	256	265	274	284	293	_
471		302	311	321	330	339	348	357	367	376	385	,9
472		394	403	413	422	431	440	449	459	468	477	10.9 .
473		486	495	504	514	523	532	541	550	560	569	2 1.8
474		578	587	596	605	614	624	633	642	651	660	3 2.7
475		669	679	688	697	706	715	724	733	742	752	4 3.0
476		761	770	779	788	797	806	815	825	834	843	5 4·5 6 5·4
477		852	86 I	870	879	888	897	906	916	925	934	1 17 '
478		943	952	961	970	979	988	997	*006	*015	*024	7 6.3 8 7.2
479	68	034	043	052	06 I	070	079	088	097	106	115	8 7.2 9 8.1
480		124	133	142	151	160	169	178	187	196	205	9 0.1
481		215	224	233	242	251	260	269	278	287	296	
482		305	314	323	332	34 I	350	359	368	377	386	
483		395	404	413	422	431	440	449	458	467	476	
484		485	494	502	511	520	529	538	547	556	565	8
485		574	583	592	601	610	619	628	637	646	655	
486		664	673	681	690	699	708	717	726	735	744	10.8
487		753	762	771	780	789	797	806	815	824	833	2 1.6
488		842	851	860	869	878	886	895	904	913	922	3 2 . 4
489		931	940	949	958	966	975	984		*002		43.2
490	-09	020	028	037	046	055	064	073	082	090	099	5 4.0 6 4.8
491		108	117	126	135	144	152	161	170	179	188	7 5.6
492		197	205	214	223	232	241	249 338	258	267	276	86.4
493		285 373	294 381	302	311 399	320 408	329 417	330 425	346 434	355 443	364 452	97.2
494		373 461	469	390 478	399 487	496	504	513	522	531	539	5,7
495 496		548	557	566	574	583	592	601	609	618	627	
497		636	644	653	662	671	679	688	697	705	714	
498		723	732	740	749	758	767	775	784	793	801	
499		810	819	827	836	845	854	862	871	880	888	
500		897	906	914	923	932	940	949	958	966	975	

Tables of Logarithms

N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
500		897	906	914	923	932	940	949	958	966	975	
501	09	984				*018	*027					
502	70	070		088	096	105	114	122	131	140	148	
503	' -	157	165	174	183	191	200	209	217	226	234	1
504		243	252	260	269	278	286	295	303	312	321	
505		329	338	346	355	364	372	381	389	398	406	
506		415	424	432	441	449	458	467	475	481	492	
507		501	509	518	526	535	544	552	561	569	578	
508		586	595	603	612	621	629	638	646	655	663	
509		672	680	689	697	706	714	723	731	740	749	
510		757	766	774	783	791	800	808	817	825	834	43.6
511		842	851	859	868	876	885	893	902	910	919	5 4.5
512		927	935	944	952	961	969	978	986	995		6 5.4
513	7 I	012	020	029	037	046	054	063	071	079	0 88	76.3
514		0 96	105	113	122	130	139	147	155	164	172	
515		181	189	198	206	214	223	231	240	248	257	9/8.1
516		265	273	282	290	299	307	315	324	332	341	
517		349	357	366	374	383	391	399	408	416	425	
518		433	441	450	458	466	475	483	492	500	508	
519		517	525	533	542	550	559	567	575	584	592	
520		600	609	617	625	634	642	650	659	667	675	8
521		684	692	700 784	709	717 800	725 809	734	742	750	759	10.8
522 523		767 850	775 858	867	792 875	883	892	900	908	834 917	842 925	2 1.6
524		933	941	950	958	966	975	983	991		*00S	3 2.4
525	72	016	024	032	041	049	057	o66	074	082	90	4 3.2
526	1-	099	107	115	123	132	140	148	156	165	173	5 4.0
527		181	189	198	206	214	222	230	239	247	255	6 4.8
528		263	272	280	288	296	304	313	321	329	337	7 5.6
529		346	354	362	370	378	387	395	403	411	419	86.4
530		428	436	444	452	460	469	477	485	493	501	9 7.2
531		509	518	526	534	542	550	558	567	575	583	
532		591	599	607	616	624	632	640	648	656	665	
533		673,	681	689	697	705	713	722	730	738	746	
534		754	762	770	779	787	795	803	811	819	827	
535		835	843	852	860	868	876	884	892	900	908	7
536		916	925	933	941	949	957	965	973	981	989	1 0.7
537			*006			-			*054			2 1.4
538	73	078	o 86	0 94	102	III	119	127	135	143	151	3 2.1
539		159	167	175	183	191	199	207	215	223	231	4 2.8
540		239	247	255	263	272	280	288	296	304	312	5 3 - 5
541		320	328	336	344	352	360	368	376	384	392	6 4.2 7 4.9
542		400	408	416	424	432	440	448	456	464	472	8 5.6
543		480	488 568	496	504	512	520	528	536	544	552	9,6.3
544		560 640	648	576 656	584 664	592 672	600 679	608 687	616 695	624 703	632 711	9,0.3
545 546		719	727	735	743	751	759	767	775	783	791	
547		799	807	815	823	830	838	846	854	862	870	
548		878	886	894	902	910	918	926	933	941	949	
549		957	965	973	981	989	997	* 005		* 020		
550	74	036	044	052	060	o68	076	084	092	099	107	

Tables of Logarithms

N.	L.	0	I	2	3	4	5	6	7	8	9	P. P.
550	74	036	044	052	060	o 68	076	084	092	099	107	
551	` '	115	123	131	139	147	155	162	170	178	186	
552		194	202	210	218	225	233	241	249	257	265	
553		273	280	288	296	304	312	320	327	335	343	
554		351	359	367	374	382	390	398	406	414	421	
555		429	437	445	453	461	468	476	484	492	500	
556		507	515	523	53I	539	547	554	562	570	578	1
557		586	593	601	609	617	624	632	640	648	656	
558		663	671	679	687	695	702	710	718	726	733	
559		741	749	757	764	772	780	788	796	803	811	
560		819	827	834	842	850	858	865	873	881	889	8
561		896	904	912	920	927	935	943	950	958	966	10.8
562		974	981	989	997	*005	; ⊘I2	*020	* 028	*035	*043	2 1.6
563	75	051	059	o 66	074	082	089	097	105	113	I 20	3 2.4
564		128	136	143	151	159	166	174	182	189	197	43.2
565		205	213	220	228	236	243	251	259	266	274	5 4.0
566		282	289	297	305	312	320	328	335	343	351	6 4.8
567		358	366	374	381	389	397	404	412	420	427	7 5.6
568		435	442	450	458	465	473	481	483	496	504	86.4
569		511	519	526	534	542	549	557	5 65	572	580	9 7.2
570		587	595	603	610	618	626	633	641	648	656	917.2
571		664	67 I	679	686	694	702	709	717	724	732	
572		740	747	755	762	770	778	785	793	800	808	
573		815	823	831	8 38	846	853	861	868	876	884	
574		891	899	906	914	921	929	937	944	952	959	
575		967	974	982	989	997			* 020			[
576	76	042	050	057	065	072	080	087	0 95	103	110	
577		118	125	133	140	148	155	163	170	178	185	
578		193	200	208	215	223	230	238	245	253	260	
579		268	275	283	290	298	305	313	320	328	335	1
580		343	350	358	365	373	380	388	395	403	410	7
581		418	425	433	440	448	455	462	470	477	485	10.7
582		492	500	507	515	522	530	537	545	552	559	2 1.4
583		567	574	582	589	597	604	612	619	626	634	3 2.1
584		641	649	656	664	671	678	686	693	701	708	4 2.8
585		716	723	730	738	745	753	760	768	775	782	5 3 - 5
586		790	797	805	812	819	827	834	842	849	856	6 4.2
587		864	871	879	886	893	901	908	916	923	930	7 4.9
588		938	945	953	960	967	975	982	989	997		8 5.6
589	77	012	019	026	034	041	048	056	063	070	078 151	96.3
590		085	093	100	107 181	115 188	122	129	137	144		
591		159	166	173		188 262	195	203 276	210 283	217 291	225 298	1
592		232	240	247	254		269		_	364	371	ļ
593		305	313	320	327	335	342	349	357			
594		379	386	393 466	401	408 481	415	422	430 503	437 510	444 517	
595		452	459	466	474		561	495 568	576	583	590	
596		525	532 605	539 612	546 619	554 627	634	641	648	656	663	
597	i	597	677	685	692	699	706	714	721	728	735	ı
598	1	570 743	750	757	764	772	779	786	793	801	808	
600		815	822	830	837	844	851	859	866	873	880	
		212	022	0,0	937	044	1 031	039	000	9/3	000	

Tables of Logarithms

N.	L. o	I	2	3	4	5	6	7	8	9	P. P.
600	77 815	822	830	837	844	851	859	866	873	880	
601	887	895	902	909	916	924	931	938	945	952	
602	960	967	974	981	988	996	¥003		*017		
603	78 032	039	046	053	061	o68	075	082	089	097	
604	104	III	118	125	132	140	147	154	161	168	
605	176	183	190	197	204	211	219	226	233	240	8
606	247	254	262	269	276	283	290	297	305	312	10.8
607	319	326	333	340	347	355	362	369	376	383	21.6
608	390	398	405	412	419	426	433	440	447	455	3 2.4
609	462	469	476	483	490	497	504	512	519	526	43.2
610	533	540	547	554	561	569	576	583	590	597	5 4.0
611	604	611	618	625	633	640	647	654	661	668	6 4.8
612	675	682	689	696	704	711	718	725	732	739	7 5.6
613	746	753	760	767	774	781	789	796	803	810	86.4
614	817	824	831	838	845	852	859	866	873	880	97.2
615	888	895	902	909	916	923	930	937	944	951	317.2
616	958	965	972	979	986	993		*007			
617	79 029	036	043	050	057	064	071	078	085	092	
618	099	106	113	120	127	134	141	148	155	162	
619	169	176	183	190	197	204	211	218	225	232	
620	239	246	253	26 0	267	274	281	288	295	302	7
621	309	316	323	330	337	344	351	358	365	372	10.7
622	379	386	393	400	407	414	421	428	435	442	2 1.4
623	449	456	463	470	477	484	491	498	505	511	3 2.1
624	518	525	532	539	546	553	560	567	574	581	4 2.8
625	588	595	602	609 678	616 685	623	630	637	644	650 720	5 3.5
627	657	664	671	748	_	692 761	699 768	706	713 782	789	6 4.2
628	727 796	734 803	741 810	817	754 824	831	837	775 844	851	858	7 4.9
629	865	872	879	886	893	900	906	913	920	927	8 5.6
630	934	941	948	955	962	969	975	982	989	996	96.3
631	80 003	010	017	024	030	037	044	051	058	065	
632	072	079	085	092	099	106	113	120	127	134	
633	140	147	154	161	168	175	182	188	195	202	
634	209	216	223	229	236	243	250	257	264	271	
635	277	284	291	298	305	312	318	325	332	339	
636	346	353	359	366	373	380	387	393	400	407	6
637	414	421	428	434	441	448	455	462	468	475	10.6
638	482	489	496	502	509	516	523	530	536	543	2 1.2
639	550	557	564	570	577	584	591	598	604	611	3 1.8
640	618	625	632	638	645	652	659	665	672	679	4 2.4
641	686	693	699	706	713	720	7 26	733	740	747	5 3.0
642	754	760	767	774	78 I	787	794	801	808	814	63.6
643	821	828	835	841	848	855	862	868	875	882	7 4.2
644	889	895	902	909	916	922	929	936	943	949	8 4.8
645	956	963	969	976	983	990		* 003			9 5-4
646	81 023	030	037	043	050	057	064	070	077	084	j
647	090	097	104	III	117	124	131	137	144	151	
648	158	164	171	178	184	191	198	204	211	218	
649	224	231	238	245	251	258	265	271	278	285	
650	291	298	3 05	311	318	325	331	338	345	351	

Tables of Logarithms

	N.	L.	0	1	2	3	4	5	6	7	8	9	P. P.
16	550	81	291	298	305	311	318	325	331	338	345	351	
	551		358	365	371	378	385	391	398	405	411	418	
	552		425	431	438	445	451	458	465	47 I	478	485	
	653		491	498	505	511	518	525	531	538	544	551	
	654		558	564	571	578	584	591	598	604	611	617	
	655		624	631	637	644	651	657	664	671	677	684	
	656		690	697	704	710	717	723	730	737	743	750	
	657		757	763	770	776	783	790	796	803	809	816	
	658		823	829	836	842	849	856	862	869	875	882	
10	659		889	895	902	908	915	921	928	935	941	948	
	660		954	961	968	974	981	987			*007		7
	66ı	82	020	027	033	040	046	053	060	o 66	073	079	
	662		086	092	099	105	112	119	125	132	138	145	10.7
10	663		151	158	164	171	178	184	191	197	204	210	2 1.4
-10	664		217	223	230	236	243	249	256	263	269	276	3 2.1
-10	665		282	289	295	302	308	315	321	328	334	341	4 2.8
10	666		347	354	360	367	373	380	387	393	400	406	5 3 · 5 6 4 · 2
- 1 (667		413	419	426	432	439	445	452	458	465	471	
- [(668		478	484	491	497	504	510	517	523	530	536	74.9
- 1	669		543	549	556	562	569	575	582	588	595	601	8 5.6
- 1	670		607	614	620	627	633	640	646	653	659	666	9 6.3
- 1	671		672	679	685	692	698	705	711	718	724	730	
- 1 (672		737	743	750	756	763	769	776	782	789	795	
- 1	673		802	808	814	821	827	834	840	847	853	860	
- -	674		866	872	879	885	892	898	905	911	918	924	
- -	675		930	937	943	950	956	963	969	975	982	988	
	676		995	*00I	*008	*014	* 020	*027	* >33	*040	* 046	* 052	
	677	83	059	o 65	072	078	085	091	0 97	104	110	117	
	678		123	129	136	142	149	155	161	168	174	181	
	679		187	193	200	206	213	219	225	232	238	245	
	680		251	257	264	270	276	283	289	296	302	30 8	6
	681		315	321	327	334	340	347	353	359	366	372	-1- 6
	682		378	385	39 I	398	404	410	417	423	429	436	2 1.2
	683		442	448	455	461	467	474	480	487	493	499	3 1.8
	684		506	512	518	525	531	537	544	550	556	563	4 2.4
	685		569	575	582	588	594	601	607	613	620	626	1 1 1
	686		632	639	645	651	658	664	670	677	683	689	63.6
	687		696	702	7 0 8	715	721	727	734	740	746	753	
	688		759	765	771	778	784	790	797	803	809	816	0.0
	689		822	828	835	84 t	847	853	860	866	872	879	0 = 4
	690		885	891	897	904	910	916	923	929	935	942	3,5
	691	Q.	948	954	960	967	973	979	985	992	998	*004	
	692	04	011	017	023	029	036	042	048	055	061	067	
	693 604		073	080	086	092	098	105	111	117	123	130	
	694 695	1	136 198	142	148	155	161	167	173 236	180 242	186 248	192 255	
	695 696		198 261	205 267		217 280	223 286	230	230 298		311		
	697				273		_	292	361	305 367	-	317	
	698	1	323 386	330 392	336 398	342 404	348 410	354	423	429	373 435	379 442	
	699		448	454	460	466	473	417	485	491	433	504	
	700]	510	516	522	528	535	541	547	55 3	559	566	
- 1 -	,		210	210	344	320	222	1 344	34/	333	229	300	

Tables of Logarithms

N.	L.	•	I	2	3	4	5	6	7	8	9	P. P.
700	84		516	522	528	535	541	547	553	559	566	
701	04	572	578	584	590	597	603	609	615		628	
702		634	610	646	652	658	665	671	677	683	689	,
703		696	702	708	714	720	726	733	739		751	
704		757	763	770	776	782	788	794			813	
705		819	825	831	837	844	850	856	862	868	874	
706		880	887	893	899	905	911	917	924		936	7
707		942	948	954	960	967	973	979	985	991	997	10.7
708	85	003	009	016	022	028	034	040			058	2 1.4
709	3	065	071	077	083	089	095	101	107	114	120	3 2.1
710		126	132	138	144	150	156	163	169	175	181	4 2.8
711	1	187	193	199	205	211	217	224	230		242	
712		248	254	260	266	272	278	285	291	297	303	5 3·5 6 4·2
713		309	315	321	327	333	339	345	352	358	364	7 4.9
714		370	376	382	388	394	400	406	412	418	425	8 5.6
715		431	437	443	449	455	461	467	473	479	485	96.3
716		491	497	503	509	516	522	528	534	540	546	310.3
717		552	558	564	570	576	582	588	594	600	606	
718	ĺ	612	618	625	631	637	643	649	655	661	667	
719	1	673	679	685	691	697	703	709	715	721	727	
720	l	733	739	745	751	757	763	769	775	781	788	6
721		794	800	806	812	818	824	830	836	842	848	
722		854	860	866	872	878	884	890	896	902	908	10.6
723		914	920	926	932	938	944	950	956	962	968	2 1.2
724		974	980	986	992	998				*Q22		3 1.8
725	86	034	040	016	052	058	064	070	076	082	088	4 2.4
726		094	100	106	112	118	124	130	136	141	147	5 3.0
727		153	159	165	171	177	183	189	195	201	207	6 3.6
728		213	219	225	231	237	243	249	255	26 I	267	7 4.2
729		273	279	285	291	297	303	308	314	320	326	8 4.8
730	ĺ	332	338	344	350	356	362	368	374	380	386	9 5 - 4
73I		392	398	404	410	415	421	427	433	439	445	
732		45 I	457	463	469	475	481	487	493	499	504	
733		510	516	522	528	534	540	546	552	558	564	
734		570	576	581	587	593	599	605	611	617	623	
735		629	635	641	646	652	658	664	670	676	682	.5
736		688	694	700	705	711	717	723	729	735	741	10.5
737		747	753	759	764	770	776	782	788	791	800	2 1.0
738		806	812	817	823	829	835	841	847	853	859	3 1.5
739		864	870	876	882	888	894	900	906	911	917	4 2.0
740		923	929	935	941	947	953	958	964	970	976	5 2.5
741		982	988	994	999	*005	110%	* 017	* 023	* 029	* 035	6 3.0
742	87	040	046	052	058	064	070	075	081	087	0 93	7 3-5
743		099	105	111	116	122	128	134	140	146	151	8 4.0
744		157	163	169	175	181	186	192	198	204	210	9 4 - 5
745		216	22 I	227	233	239	245	25[256	262	268	
746		274	280	286	291	297	303	309	315	320	326	
747		332	338	344	349	355	36 t	367	373	379	384	
748		390	396	402	408	413	419	425	431	437	442	
749		448	454	460	466	47 I	477	483	489	495	500	
750		506	512	518	523	529	535	541	547	552	558	[

Tables of Logarithms

N.	L.	•	I	2	3	4	5	6	7	8	9	P. P.
750	87	506	512	518	523	529	535	541	547	552	558	
751		564	570	576	581	587	593	599	604	610	616	
752		622	628	633	639	645	651	656	662	668	674	
753		679	685	69 1	697	703	708	714	720	726	731	
754		737	743	749	754	760	766	772	777	783	789	
755		795	800	806	812	818	823	829	835	841	846	
756		852	858	864	869	875	881	887	892	898	904	
757		910	915	921	927	933	938	944	950	955	961	
758		967	973	978	984	990	996			*013	*018	
759	88	024	030	036	041	047	053	058	064	070	076	
760		180	0 87	093	098	104	110	116	121	127	133	6
76I		138	144	150	156	161	167	173	178	184	190	10.6
762		195	201	207	213	218	224	230	235	241	247	2 1.2
763		252	258	264	270	275	281	287	292	298	304	3 1.8
764		309	315	321	326	332	338	343	349	355	360	4 2.4
765		366	372	377	383	389	395	400	406	412	417	5 3.0
766		423	429	434	440	446	451	457	463	468	474	63.6
767		480	485	491	497	502	508	513	519	525	530	7 4 - 2
768		536	542	547	553	559	564	570	576	581	587	8 4.8
769		593	598	604	610	615	621	627	632	638	643	9 5 - 4
770		649	655	660	666	672	677	683	689	694	700	
771		705	711	717	722	728	734	739	745	750	756	
772		762	767	773	779	784	790	795	108	807	812	
773		818	824	829	835	840	846	852	857	863	868	
774		874	880	885	891	897	902	908	913	919	925	
775		930	936	941	947	953	958	964	969	975	981	
776	80	986 042	992		*003	*009		076		*031		i
777	09	042	048	053	059	064	126		081	087	092	
778		-	104	109 165	115	120 176	182	131 187	137	143	148	
779		154 209	159 215	221	226	232	237	243	193 248	198	204 260	_
781		265	271	276	282	287	293	298	304	254 310	315	,5
782		321	326	332	337	343	348	354	360	365	371	1 0.5
783		376	382	387	393	398	404	409	415	421	426	2 1.0
784		432	437	443	448	454	459	465	470	476	481	3 1.5
785		487	492	498	504	509	515	520	526	531	537	4 2.0
786		542	548	553	559	564	570	575	581	586	592	5 2.5
787		597	603	609	614	620	625	631		642	647	63.0
788		653	658	664	669	675	680	686	691	697	702	7 3 . 5
789		708	713	719	724	730	735	741	746	752	757	8 4.0
790		763	768	774	779	785	790	796	801	807	812	9/4-5
791		818	823	829	834	840	845	851	856	862	867	
792		873	878	883	889	894	900	905	911	916	922	
793		927	933	938	944	949	955	960	966	971	977	
794		982	988	993	998					* 026		
795	90	037	042	048	053	059	064	069	075	080	086	1
796		091	097	102	108	113	119	124	129	135	140	Į.
797		146	151	157	162	168	173	179	184	189	195	i
798		200	206	211	217	222	227	233	238	244	249	ļ
799		255	260	266	271	276	282	287	293	298	304	
800		309	314	320	325	331	336	342	347	352	358	

Tables of Logarithms

- NT	T .					DICS C	1 106					
N.	L.	0	1	3	3	4	_ 5	6	7	8	9	P. P.
800	90	309	314	320	325	331	336	342	347	352	358	
801		363	369	374	380	385	390	396	401	407	412	
802	1	417	423	428	434	439	445	450	455	461	466	
803		472	477	482	488	493	499	504	509	515	520	
804		526	531	536	542	547	553	558	563	569	574	
805	}	580	585	590	596	601	607	612	617	623	628	
806		634	639	644	650		660	666	67 I	677	682	
807		687	693	8ر۶	703	709	714	720	725	730	736	
808		74I	747	752	757	763	768	773	779	784	789	
809		795	800	806	811	816	822	827	832	838	843	
810		849	854	859	865	870	875	881	886	891	897	6
811		902	907	913	918	924	929	9.34	940	945	950	10.6
812		956	961	966	972	977	982	988	993	998	*00 4	2 1.2
813	91	∞9	014	020	025	030	036	041	046	052	057	31.8
814		062	o68	073	078	084	089	094	100	105	110	4 2.4
815		116	121	126	132	137	142	148	153	158	164	53.0
816		169	174	180	185	190	196	201	206	212	217	6.3.6
817		222	228	233	238	243	249	254	259	265	270	7 4.2
818		275	281	286	291	297	302	307	312	318	323	8 4.8
819		328	334	339	344	350	355	360	36 5	371	376	9 5 - 4
820		38 1	387	392	397	403	408	413	418	424	429	
821		434	440	445	450	455	461	466	471	477	482	
822		487	492	498	503	508	514	519	524	529	535	
823	ì	540	545	551	556	561	566	572	577	582	587	
824		593	598	603	609	614	619	624	630	635	640	
825		645	651	656	661	665	672	677	682	687	693	
826		698	703	709	714	719	724	730	7.35	740	745	
827		75I	756	76 I	766	772	777	782	787	793	798	
828	}	803	808	814	819	824	829	8.34	840	845	850	
829	1	855	86 I	866	871	876	882	887	892	897	903	
8.30		908	913	918	924	929	934	939	944	950	955	5
831	1	960	965	971	976	981	986	991	997	*002	*007	10.5
832	92	012	018	023	028	033	038	044	049	054	059	2 1.0
833		065	070	075	080	085	091	096	101	106	III	3 1.5
834		117	122	127	132	137	143	148	1 53	158	163	4 2.0
835	ł	169	174	179	184	189	195	200	205	210	215	5 2.5
836	ł	22I	226	2.31	236	24 I	247	252	257	262	267	6 3.0
837		273	278	283	288	293	298	304	309	314	319	7 3.5
838 -		324	330	33 5	340	345	350	355	361	366	371	8 4.0
839	1	376	381	387	392	397	402	407	412	418	423	9 4.5
840	1	428	433	438	443	449	454	459	464	469	474	
841	[480	485	490	495	500	505	511	516	521	526	
842		531	536	542	547	552	557	562	567	572	578	
843		583	588	593	598	603	609	614	619	624	629	
844		634	639	645	650	655	660	665	670	675	681	
845	1	686	691	696	701	706	711	716	722	727	732	
846	1	737	742	747	752	758	763	768	773	778	783	
847		788	793	799	804	809	814	819	824	829	834	
848		840	845	850	855	860	865	870	875	88r	886	
849		89 t	896	901	906	911	916	921	927	932	937	
850	1	942	947	952	957	962	967	973	978	983	988	

Tables of Logarithms

F 87												D D
N.	L.	•	1	2	3	4	5	6	7	8	_ 0	P. P.
850	92	942	947	952	957	962	967	973	978	983	988	
851		993	998	*003	*008	*213	\$10×	* 024	*029	* 034	* 039	
852	93	044	049	054	059	064	069	075	080	085	090	
853		095	100	105	110	115	120	125	131	136	141	
854		146	151	156	161	166	171	176	181	186	192	
855		197	202	207	212	217	222	227	232	237	242	6
856		247	252	258	263	268	273	278	283	288	293	1 0.6
857		298	303	308	313	318	323	328	334	339	344	
858		349	354	359	364	369	374	379	384	389	394	2 1.2
859		399	404	409	414	420	425	430	435	440	445	3 1.8
860		450	455	460	465	470	475	480	485	490	495	4 2.4
86 r		500	505	510	515	520	526	531	536	541	546	5 3.0
862		551	556	561	566	57 I	576	58 1	586	591	596	6 3.6
863		601	606	611	616	621	626	631	636	641	646	7 4.2
864		651	656	66 I	666	671	676	682	687	692	697	8 4.8
865		702	707	712	717	722	727	732	737	742	747	9.5-4
866		752	757	762	767	772	777	782	787	792	797	
867		802	807	812	817	822	827	832	837	842	847	
868		852	857	862	867	872	877	882	887	892	897	
869		902	907	912	917	922	927	932	937	942	947	
870		952	957	962	967	972	977	982	987	992	997	
871	94	002	007	012	017	022	027	032	037	042	047	.5
872	1	052	057	062	067	072	077	082	086	100	096	10.5
873		101	106	111	116	121	126	131	136	141	146	2 1.0
874	ĺ	151	156	161	166	171	176	181	186	191	196	3 1.5
875	1	301	206	211	216	221	226	231	236	240	245	42.0
876		250	255	260	265	270	275	280	285	290	295	5 2.5
877	1	300	305	310	315	320	325	330	335	340	345	63.0
878		349	354	359	364	369	374	379	384	389	394	7 3.5
879	1	399	404	409	414	419	424	429	433	438	443	8 4.0
880		448	453	458	463	468	473	478	483	488	493	9 4.5
881		498	503	507	512	517	522	527	532	537	542	
882		547	552	557	562	567	571	576	581	586	591	
883	ļ	596	601	606	611	616	621	626	630	635	640	
884		645	650	655	660	665	670	675	680	685	689	
885	1	694	699	704	709	714	719	724	729	734	738	
886		743	748	753	758	763	768	773	778	783	787	4
887		792	797	802	807	812	817	822	827	832	836	10.4
888		841	846	851	856	861	866	871	876	880	885	20.8
889	1	890	895	900	905	910	915	919	924	929	934	3 1.2
890	1	939	944	949	954	959	963	968	973	978	983	41.6
891		988	993		*002		*OI2	•	*O22			5 2.0
892	ا مد	036	993 041	046	051	056	061	066	071	075	080	6 2.4
893	1 33	085	090	095	100	105	109	114	119	124	129	7 2.8
894		134	139	143	148	153	158	163	168	173	177	8 3.2
895		182	187	192	197	202	207	211	216	221	226	93.6
896		231	236	240		250	255	260	265	270	274	313.2
897			284	289	245	-		308	313	318	323	
898	1	279 328			294	299	303	357	361	366	323 37I	
	1		332 381	337	342	347	400	40.0	410	415	419	
899	1	376	-	386	390	395		405			468	
900	1	424	429	434	439	444	448	453	458	463	400	

Tables of Logarithms

900 95 424 429 434 439 444 497 501 506 511 516 902 521 525 530 535 555 540 555 554 559 564 903 569 574 578 583 588 583 593 598 602 607 612 904 617 622 626 631 636 641 646 650 655 660 905 665 670 674 679 684 689 694 698 703 708 907 761 766 770 775 780 785 789 794 799 804 908 809 813 818 823 828 832 837 842 847 852 909 856 861 866 871 875 880 885 890 895 899 914 918 923 928 933 938 942 947 911 952 957 961 966 971 976 980 985 990 995 10 904 909 914 918 923 928 8033 938 8042 91 910 904 909 914 918 913 923 928 8033 938 8042 91 109 109 104 109 114 118 123 128 133 137 915 142 147 152 156 161 166 171 175 180 185 919 190 190 190 190 204 209 213 218 223 227 235 918 284 289 294 298 303 308 313 317 322 327 336 341 346 350 355 360 365 369 374 919 332 336 341 346 350 355 360 365 369 374 919 910 910 910 910 910 910 910 910 910	N.	L.	0	I	3	3	4	5	6	7	-8	9	P. P.
901	900	95	424	429	434				453	458	463	468	
902 521 525 530 535 540 545 550 554 559 564 560 693 569 574 578 583 588 593 598 602 607 612 616 616 616 616 616 616 616 616 616	1 -	••											
903 569 574 578 583 583 583 593 598 602 607 612 904 617 622 626 631 636 641 646 650 653 660 905 665 670 674 679 684 689 694 698 703 708 906 713 718 722 727 732 737 742 746 751 756 907 761 766 770 775 780 785 789 794 799 804 908 809 813 813 823 828 829 944 947 952 957 961 966 971 976 980 985 990 995													
904 617 622 626 631 636 641 646 650 655 660 995 665 670 674 679 654 689 694 698 703 708 907 713 718 722 727 732 737 742 746 751 755 907 761 766 770 775 780 785 789 794 799 804 908 809 813 818 823 828 832 837 842 847 852 909 904 909 914 918 923 928 933 938 942 947 911 952 957 961 966 971 976 980 985 999 995 912 909 *** \$\delta \times													
905 665 670 674 679 684 689 694 698 703 708 713 718 722 727 732 737 742 746 751 756 761 766 770 775 780 785 789 794 799 804 809 813 818 823 828 832 837 842 847 852 899 856 861 866 871 875 880 885 890 895 899 910 904 909 914 918 923 928 933 938 942 947 911 992 \$\$\text{\$\	904		617				636			650	655	660	
906	905		665	670	674							708	
908	906		713	718	722	727	732	737				756	
908	907		761	766	770	775	780	785	789				
909	908		809	813	818		828	832	837			852	
910	909		856	861	866	871	875	880	885	890		1	
911 952 957 901 900 971 970 980 985 990 995 991 911 912 999 \$\times \text{94}\$ \$\times \text{99}\$ \$\times \text{94}\$ \$\times \text{95}\$ \$\times \text{97}\$ \$\times \text{95}\$ \$\times \t	910		904	909	914	918	923	928	933		942		
913 96 047 052 057 061 066 071 076 080 085 090 15.5 095 099 104 109 114 118 123 128 133 137 142 147 152 156 161 166 171 175 180 185 15.5 156 161 190 194 199 204 209 213 218 223 227 232 16 237 242 246 251 256 261 265 270 275 280 13.0 081 084 388 393 398 044 049 053 085 060 065 0609 095 100 194 194 194 194 194 194 195 195 080 085 090 194 195 186 188 128 133 137 082 188 188 189 197 092 092 093 194 195 080 195 080 195	911		952	957	961	966	971	976	980	985			
914	912		999	* 004	*009	* 014	*019	* 023	* 028	* 033	* 038	*042	
915	913	96	047	052	057	061	o 66	071	076	080	085	090	
916	914		095	099	104	109	114	118	123	128	133	137	
917 237 242 246 251 256 261 265 270 275 280 7,3 5 919 332 336 341 346 350 355 360 365 369 374 491	915		142	147	152	156	161	166	171	175	180	185	
918 284 289 294 298 303 308 313 317 322 327 7 3 5 8 4 0 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	916		190	194	199	204	209	213	218	223	227	232	
919 332 336 341 346 350 355 360 365 369 374 8 4 \cdot 0 9 9 9 9 9 9 9 9 9	917		237		246	251	256	261	265	270	275	280	
920	918		284	289	294	298	303	308	313	317	322	327	
921	919		332	336		346	350	355	360	36 5	369	374	
922 473 478 483 487 492 497 501 506 511 515 923 520 525 530 534 539 544 548 553 558 562 924 667 575 577 581 586 591 595 600 605 609 925 661 666 670 675 680 688 682 667 652 656 927 708 713 717 722 727 731 736 741 745 750 928 852 866 811 816 820 825 830 834 839 844 930 848 853 858 862 867 872 876 881 886 890 931 942 946 951 956 960 965 970 974 979 984 938 932	1 - 1			384		393	398	402	407	412			914-5
923	921		426				445	450	454	459	464	468	
924 567 572 577 581 586 591 595 600 605 609 925 614 619 624 628 633 642 647 652 656 926 661 666 670 675 680 685 689 694 699 703 927 708 713 717 722 727 731 736 741 745 750 928 755 759 764 769 774 778 783 788 792 797 929 802 806 811 816 820 825 830 834 839 844 931 895 900 909 914 918 923 928 932 937 932 942 946 951 956 960 965 970 974 979 984 1 0.4 933 988<				478	483	487	492	497		506			
925 614 619 624 628 633 638 642 647 652 656 661 666 670 675 680 685 689 694 699 703 708 713 717 722 727 731 736 741 745 750 928 755 759 764 769 774 778 783 788 792 797 8802 866 811 816 820 825 830 834 839 844 839 844 835 858 862 867 872 876 881 886 890 931 932 942 946 951 956 960 965 970 974 979 984 918 923 928 932 937 932 942 946 951 956 960 965 970 974 979 984 918 923 928 932 937 932 941 8086 890 995 100 104 109 114 118 123 4 1.6 123 123 124 146 151 155 160 165 169 169 124 179 183 188 192 197 202 206 211 216 6 2.4 129 129 129 120 120 120 120 120 120 120 120 120 120													
926 661 666 670 675 680 685 689 694 699 703 927 708 713 717 722 727 731 736 741 745 750 928 755 759 764 769 774 778 783 788 792 797 929 802 866 811 816 820 825 830 834 839 844 931 942 946 951 956 960 965 970 974 979 984 933 988 993 997 *202 *207 *011 *016 *025 *030 4 933 97 305 399 944 049 053 058 663 670 702 707 3 1.2 0.8 933 97 305 309 044 049 053 058 663 670 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
927 708 713 717 722 727 731 736 741 745 750 928 805 806 811 816 820 825 832 884 892 848 853 858 862 867 872 876 881 886 890 930 848 853 858 862 867 872 876 881 886 890 931 994 999 914 918 923 928 932 937 937 938 993 997 ***002 ***007 965 970 974 979 984 937 934 97 935 939 940 933 997 ***002 ***007 965 970 974 979 984 10.4 937 935 939 940 933 937 941 118 123 11.2 146 151 155 160 165 169 52.0	1 1									- '		- 1	
928 755 759 764 769 774 778 783 788 792 797 929 802 866 811 816 820 825 830 834 839 844 930 848 853 858 862 867 872 876 881 886 890 931 9942 946 951 956 960 965 970 974 979 984 933 988 993 997 ***02 ***007 **011 **016 **021 **025 **030 934 97 035 039 044 049 053 058 063 067 072 077 31.2 935 128 132 137 142 146 151 155 160 165 165 52.0 937 174 179 183 188 192 197 202 206 211<	, ,									-			
929 802 806 811 816 820 825 830 834 839 844 930 848 853 858 862 867 872 876 881 886 890 931 992 904 909 914 918 923 928 932 937 932 938 993 997 802 806 960 965 970 974 979 984 1 0.4 933 938 993 997 802 806 960 965 970 974 979 984 1 0.4 0.9 936 988 993 997 803 058 063 067 072 077 3 1.2 0.8 933 128 132 137 142 146 151 155 160 165 165 52.0 937 174 179 183 188 192 197 202 206													
930 848 853 858 862 867 872 876 881 886 890 931 932 942 946 951 956 960 918 923 928 932 937 937 965 970 974 979 984 1 0.4 988 933 997 ***002 ***007 ***011 ***101 ***102 ***025 ***030 20.8 8 1 0.4 1 0.4 965 970 974 979 984 1 0.4 0.53 0.8 663 667 072 077 3 1.0 4 1.0 4 1.0 1.1 1.1 1.1 1.1 1.0 4 1.0 1.1 1.													
931	1 1												
932 942 946 951 956 960 965 970 974 979 984 1 0.4 988 993 997 **022 **077 **011 **016 **021 **025 **030 0.8					_								4
933													710.4
934 97 035 039 044 049 053 058 063 067 072 077 3 1.2 935 081 086 090 095 100 104 109 114 118 123 4 1.6 936 128 132 137 142 146 151 155 160 165 169 6 2.0 937 174 179 183 188 192 197 202 206 211 216 6 2.4 938 220 225 230 234 239 243 248 253 257 262 7 2.8 939 267 271 276 280 285 290 294 299 304 308 8 3.2 940 313 317 322 327 331 336 340 345 350 354 941 359 364 368 373 377 382 387 391 396 400 942 405 410 414 419 424 428 433 437 442 447 943 451 456 460 465 470 474 479 483 488 493 944 497 502 506 511 516 520 525 529 534 539 945 543 548 552 557 562 566 571 575 580 585 696 946 681 685 690 695 699 704 708 713 717 722													
935	1 1	07	•									-	
936		9/							_				
937					-			1 .	-				
938													
939													
940 313 317 322 327 331 336 340 345 350 354 941 359 364 368 373 377 382 387 391 396 400 942 405 410 414 419 424 428 433 437 442 447 943 451 456 460 465 470 474 479 483 488 493 944 497 502 506 511 516 520 525 529 534 539 945 543 548 552 557 562 566 571 575 580 585 946 589 594 598 603 607 612 617 621 626 630 947 635 640 644 649 653 658 663 667 672 676 948 681 685 690 695 699 704 708 713 717 722			_	-									
941 359 364 368 373 377 382 387 391 396 400 942 405 410 414 419 424 428 433 437 442 447 943 451 456 460 465 470 474 479 483 488 493 944 497 502 506 511 516 520 525 529 534 539 945 543 548 552 557 562 566 571 575 580 585 946 589 594 598 603 607 612 617 621 626 630 947 635 640 644 649 653 658 663 667 672 676 948 681 685 690 695 699 704 708 713 717 722	1		-						-				
942													
943	1				-	_	-						
944								1					1
945													
946													
947 635 640 644 649 653 658 663 667 672 676 948 681 685 690 695 699 704 708 713 717 722													ł
948 681 685 690 695 699 704 708 713 717 722			2 -	2.5								1	
										-			
	949		727	731	736	740	745	749	754	759	763	768	
950 772 777 782 786 791 795 800 804 809 813													

Tables of Logarithms

_													
1_	N.	L.	0	I	2	3	4	5	6	7	8	9	P. P.
	950	97	772	777	782	786	791	795	800	804	809	813	
1	951		818	823	827	832	836	841	845	850	855	859	
	952		864	868	873	877	882	886	891	896	900	905	
	953		909	914	918	923	928	932	937	941	946	950	
1	954		955	959	964	968	973	978	982	987	991	996	
	955	98	000	005	009	014	019	023	028	032	037	041	
	956		046	050	055	059	064	068	073	078	082	087	
1	957		091	0 96	100	105	109	114	118	123	127	132	
1	958		137	141	146	150	155	159	164	168	173	177	
	959		182	186	191	195	200	204	209	214	218	223	
	960		227	232	236	241	245	250	254	259	263	268	5
	961		272	277	281	286	290	295	299	304	3 0 8	313	10.5
	962		318	322	327	331	336	340	345	349	354	358	21.0
	963		363	367	372	376	381	385	390	394	399	403	3 1.5
1	964		408	412	417	421	426	430	435	439	444	448	4 2.0
1	965		453	457	462	466	471	475	480	484	489	493	5 2.5
	966		498	502	507	511	516	520	525	529	534	538	63.0
1	967		543	547	552	556	561	565	570	574	579	583	7 3 . 5
	968		588	592	597	601	605	610	614	619	623	628	84.0
	969		632	637	641	646	650	655	659	664	668	673	9 4 - 5
	970		677	682	686	691	695	700	704	709	713	717	214.2
1	971		722	726	731	735	740	744	749	753	758	762	
	972		767	771	776	780	784	789	793	798	802	807	
1	973		811	816	820	825	829	834	838	843	847	851	
1	974		85 6	86 o	865	869	874	878	883	887	892	896	
-	975	!	900	905	909	914	918	923	927	932	936	941	
-	976		945	949	954	958	963	967	972	976	981	985	
	977		989	994		*003			*016				
1	978	99	034	038	043	047	052	056	061	065	069	074	
ı	979		078	0 83	087	092	096	100	105	109	114	118	
1	980		123	127	131	136	140	145	149	154	158	162	4
	981	ĺ	167	171	176	180	185	189	193	198	202	207	10.4
	982		211	216	220	224	229	233	238	242	247	251	ا ا
1	983		255	260	264	269	273	277	282	286	291	295	3 1.2
- 1	984		300	304	308	313	317	322	326	330	335	339	
- 1	985		344	348	352	357	361	366	370	374	379	383	5 2.0
-	986 987	1	388	392	396	401	405	410	414	419	423	427	6 2.4
-	988 988		432	436	441	445	449	454	458	463	467	471	7 2.8
- [989		476 520	480	484 528	489	493	498	502	506	511	515	8 3.2
-	99 0		564	524 568		533	537	542	546	550	555	559 603	
1			607	612	572 616	577 621	581 625	585	590	594 628	599		3.0
-	991		651	656	660	664	625 669	629	634	638 682	642 686	647	
- [992 993		695	699	704	708	712	673	677 721	726	730	691	
	993 994		739	743	747	752	756	760	765	769	774	734 778	
-			782	743	747	752	800	801	808	813	817	822	
Ì	995		826	830	835	795 839	843	848	852	856	861	865	
	996		870	874	878	883	887	891	896	900	904	909	
	997 998		913	917	922	926	930		939	944	948	952	
	999		957	961	965	970	974	935	939	987	940	952 996	
1	1000	00	937	004	009	013	017	022	026	030	035		
-	1000	_ ~		~4	~~9	013	017,	022	020	030	U 35	039	1





